

By Mr. Neitzert:

Q. How about Olds, Oakland, and Buick?

A. Olds, Oakland, and Buick—this exhibit shows we were supplying all of their requirements of "Fabrikoid"—artificial leather. Actually, I do not think that could have been possible, based on the sales record figures which we had.

Mr. Neitzert: In that connection, I offer in evidence Exhibit No. DP-325, which is a summary of the figures of Exhibits DP-259, 263 and 265, which shows that in 1922, Oakland's total purchases were \$5.39 a car.

Their purchases from du Pont in 1925 were \$3.07, and for 1926, \$3.91 a car.

It shows that Buick purchases of artificial leather, excluding large purchases of uncoated fabrics, amounted to [fol. 4676], \$8.28 per car in 1922; \$4.66 per car in 1925; and \$6.11 per car in 1926.

Oldsmobile purchased \$12.55 worth of materials, top and imitation leather materials per car, in 1922; \$11.65 from du Pont in 1925, and only \$7.37 from du Pont in 1926.

(Said document, so offered and received in evidence, was marked du Pont Exhibit No. 325.)

This exhibit, Government's Exhibit No. 460, contains a statement, and I quote:

"During the last half of 1926 Fisher Body placed the greater portion of their rubber business with Fairfield."

By Mr. Neitzert:

Q. What about that?

A. Well, that is true. As a matter of fact, they placed the greater portion of the rubber business during the entire year of 1926 with Fairfield.

Q. How about 1925?

A. 1925, the last three months, the greater portion was with Fairfield.

(Recess.)

[fol. 4677] The Court: Proceed.

AUBREY LEE BROWN, called as a witness on behalf of the Defendants, having been previously duly sworn, resumed the stand, was examined and testified further as follows:

Direct Examination (Continued).

Mr. Neitzert: Your Honor, I now refer to Government's Trial Exhibit No. 291 and Exhibit No. 292.

Government's Trial Exhibit No. 291 is a letter from a man named Silkman, who signs himself as a "Sales Agent," to J. A. Haskell, dated April 19, 1918.

It states, in substance:

"We are to a great extent familiar with the various Companies, comprising the General Motors, but we are afraid we have not the entire list, and pursuant to a plan, or thought, which we wish to work out, which came up at a recent meeting,"—

Will you please give us the list?

The reply, which is Government's Trial Exhibit No. 292, lists Buick, Cadillac, Oakland, Olds, General Motors Truck, and Chevrolet.

[fol. 4678] By Mr. Neitzert:

Q. What position did Mr. Silkman have with the du Pont Company in April, 1918, Mr. Brown?

A. Mr. Silkman was sales agent in our New York office.

Q. What were his duties?

A. With one assistant he called on the bookbinding, luggage, handbaggage, case covering, railroad and jobbing trades in the metropolitan area of New York.

Q. Did he have anything to do with the sales of coated fabrics to the automobile industry?

A. He did not.

Q. Or to any General Motors Company, or division?

A. He did not.

Q. Do you know what is referred to in this letter marked Government's Trial Exhibit No. 291?

A. No, I haven't the least idea.

Q. Did you know of any plan or thought involving the sale of coated fabrics to the General Motors companies that came up about this time?

A. No, I didn't hear of any, and I am sure I would have heard if anything of that sort had been in the wind in the Wilmington sales office.

Q. Will you look at Government's Trial Exhibit No. 292, and please state whether du Pont was selling coated fabrics to any of the divisions listed in that exhibit in April, 1918?

A. Du Pont was selling to all of these, and had been for a great many years.

Q. Now, will you please examine Government Trial Exhibit No. 293, which is a memorandum to Mr. C. L. Petze, from William Coyne, dated May 22, 1918.

Will you please state what position Mr. Petze held with [fol. 4679] the du Pont Company in May, 1918?

A. Mr. Petze was director of sales.

Q. Who was Mr. Coyne?

A. Mr. Coyne was the vice president in charge of sales of the du Pont Company.

Q. I call your attention to the fact that the writer of this exhibit suggests that Mr. Haskell be supplied with certain information as to sales of coated fabrics to General Motors units.

Have you ever seen this exhibit before?

A. Yes, sir.

Q. When did you first see it?

A. I saw it in 1918, probably a very few days after the date that is on it.

Q. What happened on that occasion?

A. This letter from Mr. Coyne to Mr. Petze was given to me by Mr. Petze. I recall he remarked that evidently Mr. Haskell and Mr. Burckel thought that Mr. Haskell might be able to help us out in case we got into any difficulty with General Motors, and he told me at that time to go ahead and make this statement that had been suggested.

Q. Was anything further said at that time?

A. Nothing that I can recall.

Q. What did you do about it?

A. Well, I made a layout of the form that I thought we ought to use to report, and then asked Mr. Terpenning to take care of it.

Q. Who was Mr. Terpenning at that time?

A. Mr. Terpenning at that time was in charge of our order bureau at Newburgh.

Q. I show you Government Exhibit No. 297. Was that the form of layout that you prepared at that time?

A. Yes, sir, that is it.

Q. How did you get the information that is shown on this Government Exhibit No. 297?

A. The information on pages 2 and 3 would come out of our records at the order bureau, that is, of the yardage [fol. 4680] booked and the yardage shipped each month.

The last page, the competitive sales, would simply be taken from the trade report sent in by our salesmen. Each quarter they made a trade report in which they showed the estimated purchases from competition on an annual basis.

In preparing this statement, we took those reports and divided them by twelve and showed that as a monthly purchase.

Q. How long did you use this form, which is marked Government Exhibit No. 297, in making these reports?

A. Very few months. My recollection is that we started to abbreviate it a bit, and after a reasonably short period we discontinued entirely.

Q. Did you ever receive any reply from Mr. Haskell acknowledging the receipt of these reports?

A. I never recall any reply, no, sir.

Q. Do you know what use, if any, Mr. Haskell made of the reports?

A. I do not know.

Q. How many months do you think you made the reports, either in this form or in an abbreviated form?

A. I would say not over five or six months. By the end of that period nothing had been said further by Mr. Petze, and we had not heard from Mr. Haskell, so I just took a chance and cut it out.

Q. Do you know of any occasion at this time or after May, 1918, when Mr. Haskell assisted the Fabrikoid Sales Department in obtaining orders for coated or combined fabrics from any of the General Motors Divisions or companies?

A. I don't know of any such occasion, no, sir.

Q. Did you ever hear of any occasion when Mr. Haskell attempted to assist?

A. No, sir.

[fol. 4681] Q. If Mr. Haskell had assisted or attempted to assist your Sales Department in obtaining business from any of the General Motors companies or divisions, would that information have come to your attention?

Mr. Harsha: I object to that, your Honor, as calling for a conclusion, and hypothetical.

Mr. Neitzert: I am going to ask him the reasons for his answer, your Honor—if he knows whether it would come to his attention.

Mr. Harsha: He says "If." It is hypothetical.

Mr. Neitzert: If he doesn't know, he will say he doesn't know, I presume.

The Court: He may answer.

By Mr. Neitzert:

Q. Do you know whether it would have come to your attention?

A. I am sure it would have because I was working daily with the assistant director of sales, and director of sales, and a matter of that sort would certainly have come to my attention.

Q. Did any thing like that come to your attention?

A. It did not, no, sir.

Mr. Neitzert: Now, your Honor, I wish to refer to Government's Trial Exhibits No. 295, No. 296, No. 298, No. 299, No. 300, and No. 305.

These exhibits, if the Court please, are reports to Mr. Haskell by officials of the Car Division on their purchases from du Pont, in some cases from others, in 1917 and 1918.

Exhibit No. 295 is a request from Mr. Simpson for information of this type from General Motors, and one of the [fol. 4682] other exhibits is an acknowledgment of the receipt of such information.

By Mr. Neitzert:

Q. To what did these exhibits refer, Mr. Brown?

A. These exhibits refer to an effort by du Pont Company to establish in the Fabrikoid Division the same type of industry statistical record that has been in use for a great many years in our Explosives Department.

Q. What was the nature and content of the industry's statistical record that was kept in the Explosives Department and which you attempted to adopt in the Fabrics Department?

A. They kept a record on a monthly basis that showed the sales of each producer of explosives, and also the purchases of each consumer and the concern from whom they purchased the material.

Q. How was this information obtained?

A. Every explosive salesman who called upon a customer would be required to make a report containing this information. If the customer would not divulge, then the salesman was required to give his own best estimate based on whatever information he could secure and what he thought fairly reliable.

Q. What use was made by the du Pont Company of the statistical records?

A. The records were useful in locating plants and warehouses, in routing salesmen, and locating salesmen, and deciding where they ought to be sent, and the area they should cover; carrying on sales promotion campaigns, and carrying on advertising.

There was also a fairly good record of the buying habits of the customers, also of the progress that the competitors were making one way or the other.

[fol. 4683] Q. When was the work started on establishing such a system of records for the Fabrics Division?

A. Shortly after I came into the company in 1917.

Q. What do these exhibits have to do with your work, if anything, of establishing this system of records for the Fabrics Division?

A. Well, Mr. Simpson was borrowed from the *Explosion* Department.

Q. Who was Mr. Simpson?

A. Mr. Simpson was the man who operated the system in the Explosives Department. He sat it up in our division. His first job was to decide whether or not the information that was being received from our salesmen was sufficiently reliable to make a good record. If it was not, the record would be of no value. The only way he attempted to obtain this was by taking the report from our salesmen and attempting to secure from Mr. Haskell the actual facts from different General Motors units, and compare them with our reports.

Q. Is that what these letters are about?

A. Yes.

Q. Over how long a period did Mr. Simpson work on the job of establishing this statistical system in the Fabrics Department?

A. Until sometime in 1920. At that time, it had been determined that record would not have the same benefit in our division that they had in the Explosives Department. Also, we were in a pretty serious depression, and sales were very, very materially reduced. We were studying all the jobs in the office. On this particular job, we had two men engaged in doing nothing but reporting this information, under Mr. Simpson's supervision, and we decided at that time to eliminate the job and put the men in more productive work.

Q. Did this checking done by Mr. Simpson in connection [fol. 4684] with this work of the industrial statistical records of the Fabrikoid Division have anything to do with the reports you made to Haskell following receipt of Mr. Coyne's memorandum to Mr. Petze which is marked Exhibit No. 293?

A. They did not. It was an altogether different activity.

Mr. Neitzert: Your Honor, I offer du Pont Exhibits 326 and 327.

(Said documents, so offered and received in evidence, were marked du Pont Exhibits Nos. 326 and 327.)

Mr. Neitzert: The first is a letter from Mr. Haskell to Warner, General Manager of the Oakland Motor Car Company, dated July 5, 1918; and DP 327 is a letter from Haskell to Mr. E. VerLinden, General Manager of Olds Motor Works, also dated July 5, 1918.

The letters are exactly alike except for the information as to sales which is enclosed in the letters.

I will read the letter to Warner:

“My dear Mr. Warner:

“The du Pont Company are anxious to check their statistical records of 1917 and 1918 in the matter of production of artificial leather and have asked me to obtain for them the amount actually used by us in those years.

“I am therefore writing to ask if you will have the following designations checked and see if they are correct as to number of yards purchased.”

[fol. 4685] Then there is a table showing the purchase of yards of material in 1917 and 1918.

By Mr. Neitzert:

Q. Where did that come from?

A. That came from our trade records.

Mr. Neitzert: (Reading):

“Trusting that it will not be too much trouble to have this looked up and appreciating any help you may give in the matter, I remain, Yours very truly.”

And I also call the Court's attention to a series of replies which the Government offered in evidence, and to which I have already referred. They all refer to Mr. Haskell's letter of July 5, 1918.

By Mr. Neitzert:

Q. Now, Mr. Brown, will you glance at Government's Trial Exhibits Nos. 295 and 305, and state whether or not those exhibits also refer to this check-up on the accuracy of the Fabrics Division trade reports?

A. Yes, that is the same check-up.

Q. You also examined Government's Trial Exhibit 302, which is a letter from F. Kniffen to J. A. Haskell, dated July 3, 1918, which you have already referred to in your testimony, and which contains the language that if we are to furnish top materials for Chevrolet and General Motors cars—and did that letter to Mr. Haskell have anything to do with

reference to any work done on the industrial statistical reports?

A. No, sir, it did not. This is an entirely different matter, and I think I went into that at some length in my testimony.

[fol. 4686] Mr. Neitzert: The last exhibit I will ask you to examine is Government Trial Exhibit No. 350, which is a letter from Z. Phelps of the du Pont Development Company to Mr. Pratt, vice president of General Motors, dated May 1, 1926.

It contains this language:

"We are again looking into the possibility of manufacturing oilcloth and it will be of much interest to us to learn the approximate quantity of oilcloth and black enamels which is now used annually by the General Motors Corporation."

By Mr. Neitzert:

Q. Mr. Brown, will you state what procedures are followed by the du Pont Company before the Fabrics Division is permitted to enter a new field, either new products field or a new sales field, and state whether or not that procedure has any connection with this letter?

A. In any proposal of that type, our first job would be to examine the market potential, and determine whether or not there is anything that du Pont could contribute by going into that new field.

Q. How is that done?

A. In this particular development, we were talking about the possibility of going into the oil cloth manufacturing business, and the Development Department was assigned the job to make a survey and come up with the report. In any of these instances, the field is surveyed either by personal visit or by letter, and that is what was being done in this case.

Q. Do you know whether the companies using oil cloth, other than General Motors, were solicited by the Development Department in 1926?

A. I have no recollection of that but the fact is I am pretty familiar with this type of survey. We make a cross-section, [fol. 4687] a sufficient cross-section to become fully familiar with the subject. Now in doing that, we would generally approach the large users first because their consumption fig-

ures would play quite an important part in the picture, and second, because large companies are generally quite willing to supply information of this type so long as it is not to their competitive disadvantage, because they are continually making surveys of their own in their own fields.

Q. Can you give me just one or two examples, very briefly, of other surveys that have been made like this, in connection with the expansion of the Fabrics sales and products?

Mr. Harsha: I object to the question as being completely immaterial. He is asking for surveys made outside of this industry. I see no connection—

Mr. Neitzert: I don't know the purpose of the Government's Exhibit. I assume that the Government's Exhibit was offered for the purpose of showing that there was a combination and conspiracy between General Motors and du Pont to use all of the products that du Pont would manufacture, and that du Pont was seeing how that combination and conspiracy could be exploited.

This witness is prepared—although I only ask him to give a couple of examples,—he is prepared, if Mr. Harsha wants to hear it, to show from a few of these surveys that have been made, that if the position of the Government has any probative value we have hundreds and thousands of combinations and conspiracies going on all the time, because we are constantly making surveys such as the one here involved, [fol. 4688] and making them just like this one was being made.

The fact that they are constantly made seems to me to show that there was nothing sinister or peculiar or damning in this one which the Government picked out, which happened to involve the automobile industry, and offered it in this case in support of the allegations in the complaint.

Mr. Harsha: The only allegation in the case is the relation between General Motors and du Pont.

Mr. Neitzert: This certainly shows that there was nothing unusual about those relations.

The Court: Well, for the purpose of showing that the conduct was not any different in other instances than General Motors—

Mr. Neitzert: That's right.

The Court: That may be material.

Mr. Harsha: He has already testified to that fact.

Mr. Neitzert: Well, the Government will stipulate if that is true?

Mr. Harsha: I won't stipulate, Mr. Neitzert.

Mr. Neitzert: What is the nature of your objection?

Mr. Harsha: We have stated the nature of the objection.

The Court: Try to limit it as much as you can.

By Mr. Neitzert:

Q. Try to give it, as brief as possible, so as not to annoy Mr. Harsha.

A. We have three ways of making the surveys. Where there is a very big problem involving may be a lot of time [fol. 4689] and a lot of money, the chances are that the Development Department in Wilmington would handle it. Then we have other surveys made by a group in Wilmington called the Market Survey Group. The third way is that we make surveys on our own account, in our own Trade Analysis Division.

I remember last year we were thinking about entering the field of gas meter diaphragms. We knew that was quite a large market. We knew that sheepskin was being used mainly, and also that synthetic rubber product was being used.

We had heard that that product was not successful, so we asked the Market Survey Group in Wilmington to survey that field and find out what the potential was, and what the requirements were in full, for a successful product.

They found that there are only seven manufacturers that make the type of meters that required this diaphragm, and that three of those had more than half of the business, so they sent personal interviewers to see those three and get all of the information that we needed, and gave us the report that we wanted.

The people I interviewed were the American Meter Company, Sprague Meter Company, and the Rockwell Manufacturing Company.

Q. Is there anything unusual about this oil cloth survey?

A. Nothing whatever. It is just a usual circumstance.

Q. Did you ever hear of any understanding or agreement between General Motors and du Pont or between the officials of those two companies that General Motors would buy its requirements of oilcloth or any other product that du Pont manufactured, from du Pont?

A. Never did, no.

[fols. 4690-4698] Q. Or any part of its requirements?

A. No, sir.

Q. Or that it would favor du Pont in purchasing its requirements, products at the du Pont Manufacturing Company?

A. Never heard anything of the sort.

Q. Did you ever hear of any agreement or arrangement or understanding that if du Pont went into a new field and manufactured products the General Motors was using, that General Motors would buy its requirements or any part of them from du Pont in that new field?

A. No, I never did.

Mr. Neitzert: That concludes the direct examination, your Honor.

Cross Examination.

By Mr. Harsha:

[fol. 4699] Q. Will you show Mr. Brown du Pont Exhibit No. 325, please. You were shown this exhibit on your direct examination, Mr. Brown, and I would like to ask you a few questions concerning it.

Isn't it true that during the period of the 1920's that the various units of General Motors varied their specifications from year to year as to their requirements, say, of "Fabrikoid" for trim? Weren't there design changes that some years would eliminate or cut down on the volume of trim used?

A. I don't think so. Very, very seldom. They varied in color, perhaps, but the grades themselves would run pretty steadily true.

Q. You say the grades?

A. The grades of materials. That is what you are talking about, isn't it?

Q. I am asking also about the volume of material which would be used on a particular car design from year to year.

A. I wouldn't think that would change. Cars didn't change very much in size during that period.

Q. I don't mean in size. I mean in design. You might use a "Fabrikoid" for an upholstery as opposed to natural leather.

[fol. 4700]. Mr. Neitzert: I object to the question unless he indicates whether he is referring to closed cars or open bodies.

Mr. Harsha: I am talking about all cars at this point.

Mr. Neitzert: I object to the question because this exhibit that you are asking about, this exhibit has reference only to open bodies.

Mr. Harsha: All right. I will strike the question. I will rephrase it.

By Mr. Harsha:

Q. Confining your attention to open bodies, isn't it true that some of the units of General Motors went from a "Fabrikoid" product for upholstery to a natural leather product during the 20's?

A. There is only one instance of that kind; and that was in 1925 when Oldsmobile used "Fabrikoid" for a period, and then discontinued it the following year.

Q. Would that increase the consumption of "Fabrikoid" used per car when they were using "Fabrikoid" for upholstery?

A. Yes, it would.

Q. How about top materials? Weren't there changes in the types of top materials used in the 20's?

A. Changes in types between the rubber-coated and the uncoated combined—

Q. Yes, and were there—

A. That was changing.

Q. Yes, and isn't there a price difference between the uncoated and the "Pontop"?

A. Yes.

Q. Isn't the combined fabric a much more expensive fabric than the "Pontop"?

A. It is more expensive, yes.

[fols. 4701-4705] Q. I remember you testified on direct

about the change in auto trim design in the mid-30's where I believe you said that General Motors started to use a "Fabrikoid" product as a protective layer for the lower part of the car door.

A. Yes, sir.

Q. Did you ever have any trim design changes of that sort in open cars during the 1920's?

A. They didn't change.

Q. They stayed constant from year to year?

A. You see, they had leather upholstery as a rule, and the entire sides were artificial leather.

[fols. 4706-4708] Q. What does it mean?

A. Well, when they say "requirements," they generally say "100 per cent of our requirements," or "30 per cent of our requirements," which means they do not give you a specific amount. It fluctuates according to what they require.

Q. Does that mean you were the only one supplying that customer?

A. Yes, if it was 100 per cent of their requirements, we would presumably be the only one supplying them.

Q. Did you ever see documents of the du Pont Company where they said that the company is using its requirements of a certain product?

A. I do not recall that, no. I would not say definitely over a long period. They generally put in the percentage, a portion of our requirements. Very many of them do.

Q. Do the automobile divisions of General Motors release orders to you for a month's requirements? Is that the customary fashion of doing business?

A. Are you talking about now?

Q. No, say the '20's.

A. Generally we would have a long term contract, in 1920, for six months, and would give a month's release, a month or two months, in advance, to give time to prepare for it.

[fols. 4709-4714] Q. I direct your attention to the third paragraph of this letter, which states:

"I gave Mr. Haskell a synopsis, presenting what I believe to be the full and true facts regarding our relations with the various automobile manufacturers, and it is Mr. Haskell's opinion that a continuation of our present policy should result in our securing practically all of the business of the General Motors Company

without jeopardizing our relations with other manufacturers."

By Mr. Harsha:

Q. Do you know what Mr. Haskell's position in General Motors was at that time?

A. Mr. Haskell was vice president, I believe, of General Motors.

Q. He was a sort of a liaison man, wasn't he, between du Pont and General Motors?

A. Not that I know of.

Q. You never heard of him referred to in that capacity?

A. No, I never did.

Q. Now, I believe you stated on direct that in 1922, Mr. Brown, the Buick Company bought considerable amounts of uncoated fabrics from competition. Isn't it true, though, in that year the du Pont Company was not manufacturing uncoated fabrics?

A. Yes, sir.

Q. They were not, is that right?

A. Yes, sir; they were not.

[fol. 4715] Mr. Neitzert: Your Honor, we have some excerpts from the deposition of one Charles MacShane which we would like to read, if we may, in the record at this time.

The Court: It may be read.

(The deposition of Charles E. MacShane was thereupon read into the record as follows:)

"Direct Examination:

"Q. Please state your full name.

"A. Charles E. MacShane.

"Q. Mr. MacShane, your residence is now near Leonardtown in St. Mary's County, Maryland, where this deposition is being taken.

"A. That is right.

"Q. When and where were you born?

"A. Well, that is a question.

"I was born on January 26, 1892; and when I went to work for the Government, I had to write to New York to get a birth certificate, and they said it was January 27th. So, all of my Government papers show January 27, 1892.

"Q. Where were you born?

"A. Beacon, New York.

[fol. 4716] "Q. What positions have you held, and what work have you done, either in the trades or industry, or elsewhere, since you finished school?

"A. I went to work for the du Pont Company January 1911 at Newburgh as a receiving clerk. And in 1914—d gradually advanced until 1914.

"Then I was made office manager still at Newburgh. I remained there until 1917 when I was transferred—January 1917—to Wilmington, Delaware, to the office of Mr. F. Kniffen.

"I remained there until August of 1917 when I entered the Armed Services.

"I returned to civilian life in January 1919 and returned to work with du Pont in March 1919 at which time I was transferred to Detroit as a liaison representative between the Sales Department and the Operating Department.

"I remained in Detroit until April 1929 soliciting business during this period from the automobile manufacturers. I was then transferred to Toronto, Canada with the Canadian Industries, Limited, a subsidiary of the du Pont Company as sales manager for their coated fabrics.

"I remained in Toronto until April 1930 when I returned to Detroit to enter business for myself.

"I left Detroit in 1938 for Washington, D. C. I was employed that year by the United Clay Products Company selling Carrier air conditioning units.

"I remained with that company until 1943 and was then employed by the Veterans Administration in Washington until November 1943, at which time I was transferred to Pittsburgh in the Veterans Administration Office there, and later became contact officer for the western part of Pennsylvania.

[fol. 4717] "Q. You were still with the Veterans Administration?

"A. Yes.

"In 1946 I was transferred to the Philadelphia branch office of the Veterans Administration as Chief

of Contact for the States of Pennsylvania, New Jersey, and Delaware.

"Throughout this area we had a hundred and four contact installations employing over six hundred people. When the branch offices throughout the country ceased to exist in 1949, I was transferred to the Veterans Administration in Manila, Philippine Islands, as an administration officer for the Medical Division.

"I remained in Manila for the two years which I had agreed to remain there, and then returned to the United States on June 28, 1951.

"The principal reason for my return at that time was to enter the hospital for the arthritis and neuritis which had severely handicapped me during my tour of duty in the Philippines.

"I entered Mount Alto Hospital on June 29, 1951, the day after my arrival in the States.

"I remained in that hospital for over four months, during which time several tests were conducted by my doctor but my condition did not improve to the extent whereby I could carry on a gainful occupation.

"I later returned to the hospital in May 1952 for a period of one month and through their several tests and X-rays, I was discharged with the diagnosis of arthritis of my right leg and spine.

"Q. You have been unable to engage in any gainful occupation since then?

"A. Yes.

[fol. 4718] "I applied for retirement in April 1952 which I am now receiving.

"Q. What is the condition of your health now, Mr. MacShane?

"A. From my waist up, excellent; down, I am not very good.

"Q. You are unable to travel or walk or move around?

"A. Yes. Even when I came back here—I left here before Thanksgiving and went to Washington. I was there until about a week after New Years, and I came back here. And the General came up and got me. And by the time I got back here, I could hardly walk.

"Q. When you first went with the du Pont Company

in 1911, with what department or division of the company were you associated?

"A. The Operating Department. I was with the Operating Department all throughout the years until 1919.

"Q. And was that with the Fabrikoid Company of the du Pont group of companies?

"A. Yes. The Fabrikoid Division.

"Q. Directing your attention more particularly to the period from 1919 until 1929 when you were in the Detroit office of the du Pont Company, will you please state in a little more detail the nature of your duties and the kind of work that you performed for the du Pont Company while you were in that office.

"A. Well, when I first went to Detroit, I would have laid odds that I would never be a salesman. I didn't go out for that purpose and I didn't like the idea.

[fol. 4719] "I went out there more or less as a service man for the companies to whom we were selling coated fabrics. With my experience, obtained at the plant, I had a thorough knowledge of the manufacture of the material and the purposes for which it should be used, as to the type of material for certain purposes, the strength of the material; also its colors.

"Jay Stark was the manager of the office at the time.

"He and another salesman by the name of Bud Tatum were soliciting business for du Pont from the Detroit office. About one year later, Tatum left Detroit left the company—and Mr. Stark asked me as a personal favor to call on a furniture manufacturing company to whom du Pont had never sold any material.

"Q. What kind of materials were you dealing with?

"A. 'Fabrikoid.'

"Q. Now, I was interrupted to ask you these questions about the types of materials that you were dealing with.

"Will you please go back now and state what was the nature of your duties in that Detroit office with respect to selling or handling these materials.

A. Until 1921 when Mr. Stark left the Detroit office, I was handling principally the sale of materials to other industries besides the automobile industries. This consisted of bookbinders, furniture manufacturers, repair shops for automobiles, and so forth.

"Early in 1921 I was transferred to Cleveland, Ohio, [fol. 4720] to solicit business throughout the northern part of that state. I was there only about two months or so and I received word to return to Detroit. This was about the time that Mr. Stark had left.

"And I was given the job of soliciting all businesses, including the automotive, throughout the Detroit area.

"This consisted of Michigan and Willys Overland in Toledo, Ohio.

"Q. Before you came back from Ohio and were put in charge of solicitation of business in the Detroit area, what was the nature of your duties with respect to servicing the automobile accounts in the Detroit area?

"A. While I was in Ohio?

"Q. Before you went to Ohio?

"A. Before I went to Ohio?

"Q. Yes.

"A. Whenever any company, regardless of whether it was automotive, would call the office and register a complaint, it was my duty to call upon that company to determine the cause of the complaint and to make any corrections possible and report such action to our Sales Director.

"Q. Did you have anything to do with deliveries during that period?

"A. Only when a company may have advanced their production schedule, and they would call us up and ask us to advance the date of their previous schedule.

"Q. Now, did you call on the various automobile companies in the Detroit area during this pre-Ohio period with the salesman who had the primary responsibility for selling to them?

"A. With Mr. Stark, yes, I did.

[fol. 4721] "Q. Did you continue then to have charge of the solicitation of business in the Michigan area or Detroit area from the time you returned from Ohio in 1921 until you left Detroit in 1929?

"A. With the exception of Fisher Body. I solicited Fisher Body until 1925. Then a Mr. J. Henry Smith was employed by the du Pont Company—

"Q. We will get to him a little later.

"A. —principally to solicit the Fisher business.

"Q. What duties did you have during this period with respect to keeping the home office of the Fabrikoid Company advised of conditions in the field and competitive conditions, if any?

"A. Well, any time—not any time—but every time that I called on any company whether it was on a complaint or in solicitation of business, I reported all facts to the Sales Department on a trade report which was made out daily, giving them the full story as I learned it.

"Q. What type of information would you regularly report in these trade reports?

"A. Well, if it was on a complaint which was made I would report why the material was unsatisfactory, in respect to color or quality, to what extent, how many yards out of the shipment. I would inspect the material while I was at the plant.

"Q. With reference more particularly to competition, what did you report about that?

"A. Whenever any automobile company was in the market, they would solicit quotations from, oh, probably a half dozen different manufacturers of coated fabrics.

[fol. 4722] "That was their way of getting an idea of the lowest price that was obtainable, not necessarily meaning that they were going to give anybody else the business outside of their regular sources.

"That information, when we could get our competitors' quotations, was given to Newburgh. Very seldom would a buyer give you the exact quotations he received from a competitor. He would just say, 'You are high.'

"Q. What did you do with reference to ascertaining

the total requirements of a customer of coated fabric and the sources from which he bought his coated fabrics?

"A. Well, it was generally known throughout the trade, especially throughout all of the sales representatives for the different manufacturers, who was supplying who.

"As far as the quantities of their requirements was concerned, we all knew pretty well what their production was going to be. That was published as a rule; whether they would turn out twenty thousand cars a month or five thousand or fifty thousand. We always knew the number of yards required for each model, and we would calculate it ourselves.

"Q. Did you report that information regularly back to the headquarters?

"A. Oh, yes.

"Q. Where were headquarters during this period?

"A. Newburgh.

"When I first went to Detroit, headquarters were in Wilmington; they later moved to Newburgh.

"Q. During this entire period, did you also endeavor to verify your estimates of the requirements of the [fol. 4723] manufacturers using coated fabrics and the sources from which they bought them by talking with the purchasing agent or the buyers?

"A. Well, most purchasing agents were reluctant to give detailed information. They knew that we knew how much yardage was supposed to be used on a car. They are all about standard. And we also knew what they intended to produce.

"So they knew that we had that information.

"But it may be possible—and it was possible—and it was a fact that sometimes they would have the schedule laid out for three months, and that it might be reduced or increased anywheres from ten to twenty-five percent.

"Q. Did they show you those schedules?

"A. No.

"Q. Did they tell you what was in them?

"A. No. But at one time while I was in Detroit, I

knew the output of every automobile manufacturer out there.

"Q. Did you know from whom he was buying his coated fabrics?

"A. Yes.

"Q. Who was your superior in Newburgh to whom you made your reports?

"A. H. A. Lindsay. He was Director of Sales.

"Q. Was he Director of Sales during the entire period that you were in Detroit?

"A. From 1919 until about 1927, I think it was, when he went to California. And after Lindsay, there was H. L. Hopkins.

"Q. Who determined the prices which you would quote for coated fabrics to customers and prospective customers?

"A. The Director of Sales.

[fol. 4724] "Q. Who was that?

"A. Lindsay and Hopkins. Of course, they worked in conjunction with the manager of the plant."

"Q. Now, what automobile manufacturers were buying fabrics from du Pont Company through the Detroit sales office when you were first assigned to that office in March 1919?

"A. Ford, Willys-Overland, Chevrolet, Buick, Cadillac, Olds, Oakland. In 1919 it was the Oakland Motor Company. Pontiac didn't come out until about a couple years later. When they couldn't sell any Oaklands, then they switched to Pontiac.

"Q. Did you sell anything to Metz?

"A. Metz? It wasn't in Detroit.

"Q. What about Maxwell?

"A. Maxwell was, but we didn't sell them anything.

"Q. You weren't selling to Maxwell? How about Hupp?

"A. We didn't sell them anything.

"Q. Were you selling to Reo at that time?

"A. Yes. We sold a little stuff to Reo—they were up at Lansing—but not a great deal.

"Q. Did you sell the Briggs Body Company at that time?

"A. No. We never sold Briggs in 1919.

"Q. Were you selling the American Auto Trimming Company at that time?

"A. I believe we were. Not much. We weren't selling them the majority of their requirements. Just an occasional order.

"Q. What was the situation with respect to Chevrolet Motor Company at that time?

[fol. 4725] "A. The only thing I know about Chevrolet at that time—the only information I would receive was when I was called to their plant at Flint, Michigan—all of their buying was done in New York until Chevrolet moved to Detroit in 1923.

"I was just servicing that account in Flint.

"Q. Do you know whether they were using du Pont fabrics?

"A. Yes, they were. They were using du Pont fabrics. I knew that from my experience at Newburgh. We sold Chevrolet long before I left Newburgh.

"Q. What types of fabrics were they using?

"A. They were using a rubber-coated top material and curtains, and a sateen which was known as our 6200 quality for upholstery. They were also using a lighter drill for kick pads.

"Q. What type of body were they using these fabrics for?

"A. At that time, when I first went to Detroit, the production of open cars ran around 90 to 95 percent. When I left Detroit, production of closed cars was about 90 or 95 percent. So they just switched in the ten years from the open car to the closed car.

"Q. Chevrolet was making their own open bodies at that time?

"A. Yes.

"Q. Who was making their closed bodies?

"A. I believe Fisher."

"Q. And these fabrics that Chevrolet was buying from du Pont at that time were being used in the manufacture of their open bodied cars then?"

"A. Yes."

"Q. Fisher was buying the fabrics that were being used in the manufacture of closed bodied cars?"

[fol. 4726] A. Well, on all of the closed cars they used a cloth upholstery and a pyroxylin top material.

"Q. Fisher was buying those for the closed Chevrolets?"

"A. That is right, yes."

"Q. State again when it was that Chevrolet moved their buying operations from New York to Detroit."

"A. It was in 1923 about in the spring I believe; because we had our offices in the Dime Bank Building."

"And I received a telegram one day to make arrangements to move to the General Motors Building. And it was shortly after Chevrolet moved their offices there."

"Q. Did you then solicit the Chevrolet business?"

"A. Yes."

"Q. What were the names of the Chevrolet buyers or purchasing agents that you dealt with?"

"A. Well, the Director of Purchases at that time was Donald O'Keefe. I had known him when he was a buyer of the coated fabrics at Buick Motor."

"He left Buick Motor about 1920. I think it was to take a job with Durant when they built their plant at Elizabeth, New Jersey."

"I didn't see him again until he came back to Detroit as the Director of Purchases."

"Q. Is he the one you did business with over at Chevrolet?"

"A. Yes."

"Q. When did you make your first contract with Chevrolet?"

"A. For their requirements for the last half of 1923. That is when they moved there."

[fol. 4727] "See, the contract for the first half of 1923"

was let in the New York office. The contract for the second half was let in Detroit.

"Q. You had some conversations with O'Keefe about that contract, did you?

"A. I had lots of conversations with O'Keefe about every contract—the ones I got and the ones I didn't get.

"Q. When did these negotiations for this contract occur?

"I am now speaking of the contract for the last half of 1923.

"A. They usually started negotiations about a month to two months before the period. Now that period would be from July through December. They probably started negotiations about May or June.

"Q. Tell us what happened during those negotiations.

"A. After I moved into the General Motors Building, I was on the fifth floor and O'Keefe was on the seventh floor. And I was in, oh, you might say constant touch with him. But if I didn't see him in his office, I would see him in the lobby.

"And he told me they were in the market for their requirements for the last half of the year. And they wanted quotations on certain types of materials.

"So I asked them what their schedule was or, what quantities they figured on. He would give me that information, and I would forward that to Newburgh.

"They would wire back quotations, and I would take them up to O'Keefe.

"Well, after we first submit quotations, it may be a week or it may be a month before they would decide upon their source. And there was always dickering.

[fol. 4728] "Q. You mean by the sources, the fabric concern that was going to get the contract?

"A. Yes.

"Q. Excuse me for interrupting you there.

"A. Of course, on every contract, whether it was Chevrolet or anybody else, they always tried to get a lower price, which was only natural. And if I remember correctly, our quotations for the first half of 1923 were so low that the business was not desirable from the standpoint of profit. It was in the second half of 1923

that I got the business at higher quotations which proved to be profitable for the company.

“Q. Did you get all of the business?

“A. All of the business for the last half of the year, both on the top and the upholstery.

“Q. Wasn't that the occasion when O'Keefe told you that—

“A. Wait a minute now. Shortly after he came to Detroit he told me that he had instructions from Mr. Knudsen. Knudsen at that time was President of the Chevrolet Division. And he had told O'Keefe that in the future they were to have two sources of supply. And regardless of the company to whom he gave the business it would have to be split at least 75-25 per cent.

“And the last half of the year I did not get all of the business. I only got 75 per cent of it.

“Q. Did the contract provide that du Pont would supply Chevrolet with 75 per cent of their requirements or did it specify—

“A. They did at that time give us specific yardages.

“Q. Chevrolet then also placed contracts at that time with other sources?

“A. I had an old friend of mine at the O'Bannon [fol. 4729] Company. He got the other 25 per cent.

“Q. Now, you referred a moment ago to the fact that you had gotten a little better price for your fabric than Chevrolet had paid the preceding six months?

“A. That is right.

“Q. Were you able to hold that price?

“A. We held that price for the balance of that year, I believe.

“Let's see; there was one year—I'm not sure whether it was 1923 or not—that they called in all their suppliers and asked for a reduction on the materials they were furnishing. And if it was 1923, we reduced our price four or five per cent I think it was. That is a pretty long time to remember.

“Q. I show you a document which has been offered

in evidence in this cause as Government Trial Exhibit No. 418 captioned 'Monthly Report, Cellulose Products Department 1923.'

(The document was handed to the witness.)

"You examine that document and see whether or not that refreshes your recollection as to whether you held the price and if not how much you reduced it.

"A. Well, that is just what I was saying; it is six per cent; I said four or five.

"Q. It was with reference to that first contract that you made that the price was reduced six per cent?

"A. That is right.

"Q. When you were negotiating for this contract, did you endeavor to induce O'Keefe to buy all of his [fol. 4730] requirements from du Pont of coated fabrics?

"A. On every contract I did.

"Q. And what, if anything, did he say about that that you have not already told us?

"A. Well, outside of saying that he was instructed to have two sources of supply, he told me that it wasn't on account of our material or our services, but that they were perfectly satisfactory. But he said he had to go according to instructions, and he wouldn't give over 25 per cent to one company and 75 per cent to another."

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"Q. Did he say anything about where he would prefer to buy his fabrics if it hadn't been for Mr. Knudsen?

"A. That is what I was leading up to.

"Q. Just tell us what he said.

"A. That he had to have a reliable source.

"Q. Have you told us all you can remember about that conversation there?

"A. Well, I had so many conversations with them that it is hard to pin it down to one particular time. But I do know at one time he told me that they wanted to have a source that they could depend upon to make deliveries when they wanted them.

"It wasn't their policy to carry any large inventories; because it ran up to too much money; and they wanted a source that if they called up and said they had to increase their schedule and that they wanted immediate shipment, they could get it."

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[fol. 4731] "Q. Now, what happened in 1924?

"We have been talking about the last six months of 1923. Now what happened in 1924?

"A. 1924 was a bad year, I think. When the other manufacturers found out that there was going to be two sources of supply, they came in in 1924 and put in lower quotations than we had, considerably lower, as I remember.

"And O'Keefe told me that we would not get the business unless we met competitive prices. So I immediately got in touch with the Director of Sales, and I told him our prices were too high and asked could we go any lower. Eventually they told me No.

"So we did not get any top material from Chevrolet for the first six months of 1924.

Q. Do you know whom they bought their requirements of top material from during the first six months of 1924?

"A. O'Bannon was one. And I think F. S. Carr was the other one."

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"Q. Did you get the pyroxylin-coated fabric contract during the first six months of 1924?

"A. I got the fabric—the upholstery.

"Q. Did you have to reduce your prices to get it?

"A. I don't believe so. I think our original quotation stood up.

"Q. I show you the same exhibit that I asked you to look at before. Will you please state, after examining the exhibit, whether it refreshes your recollection as

to whether you did reduce your prices to get the pyroxylin-coated fabric business from Chevrolet."

[fol. 4732-4733] "A. Well, I can't state positively that this is so. Perhaps it is."

[fol. 4734] "Q. Did you try to sell the fabric to O'Keefe at your prices?"

"A. Oh, sure.

"Q. What did he say?"

"A. He just told me that he wouldn't give us the business; that he had a much lower price and that he wouldn't pay a premium to buy du Pont. And we didn't get the business.

"Q. When did you make your next effort to sell coated fabric to Chevrolet?"

"A. The first half of 1925.

"Q. We haven't got through with the last half of 1924 yet. Didn't you try to sell them anything then?"

"A. Yes, that's right. I thought we were through with 1924.

"Yes.

"Q. What happened at that time?"

"A. I knew about the trouble. In the last half of 1924 instead of getting 75 per cent of the business, I got a hundred per cent, both on 'Fabrikoid' and top material.

"Q. During your negotiations for those contracts covering the last half of 1924, did you deal with Mr. O'Keefe?"

"A. On every contract I dealt with O'Keefe.

"Q. Was anything said during those conversations about the two sources of supply instructions?"

"A. No. And I did not mention it because he had previously told me that they had to have two sources. But when we were negotiating for the last half of 1924,

he didn't say anything about the 75-25 per cent. So I just took all of the business.

[fol. 4735] "Q. Who got the business at Chevrolet during the first six months of 1925?

"A. Three companies.

"Q. Can you name them?

"A. J. F. Heath; and I believe it was Haartz; and it seems to me it was F. S. Carr.

"Q. Did du Pont get any of it?

"A. No.

"Mr. Harsha: Can you identify what material you are talking about?

"The Witness: Top only.

"By Mr. Neitzert:

"Q. This was rubber-coated fabrics.

"A. Yes.

"Q. Did you attempt to get that business?

"A. Oh, yes.

"Q. What did O'Keefe tell you?

"A. That our prices were too far out of line. And we had been negotiating for at least a month before he let the business. And he called me up at different times and wanted to know when I would drop in and find out what the situation was and wanted to know when we were going to reduce our price.

"And I told him we were not going to reduce it on this contract; that it was our best price.

"So I believe it was that year that he told me that if I didn't give him a better price that he was going to call W. P. Allen in Wilmington.

"I don't know whether he called that one or not. But I didn't want to take the final responsibility of losing the business. So I called Lindsay at Newburgh. Lindsay was some place in New York. So I asked the Newburgh office to contact Lindsay and have him call me at home that night, which he did.

[fol. 4736] "And I gave him the story as O'Keefe gave it to me. And the prices were so far below ours that we would have lost money on it. So we discussed it on the telephone and decided that we wouldn't go any lower than our last quotation. And consequently we lost the business.

"Q. What happened after that—after those contracts were made?

"A. Well, one day I got a call from Flint——

"Q. Just about when was this?

"A. That was probably April or May.

"Q. 1925?

"A. 1925, yes.

"Charlie Weatherall was the superintendent of the Trim Plant for Chevrolet at Flint. And he said he was having trouble with the top material, and he said—or he asked me if I would go up.

"So I went up to Flint. And he had this material laid out on their tables. There were tables running around 50 or 60 feet. And I looked at the material. And I agreed with him that it was poor quality, had a poor finish, poor grain."

"A. I said, 'You have got Heath in here and Haartz and one other.' The other one was Carr. Oh, he was rather embarrassed. And I went back to Detroit. And O'Keefe called me up. I didn't call him. I didn't tell him I had been up there. He called me up in a day or so, and he said, 'Well, we are in trouble.'

"I said, 'Is that so?'

"He said, 'Yes. Our sources of supply are not living up to their schedules, and the material is inferior.'

[fol. 4737] "He said, 'How soon can you ship us a carload, and what price will you charge us?'

"I knew I could get the plant on the telephone and have a carload in a couple of days, which I did. And I told them—he said, 'As long as you have got me over the barrel, I suppose. . . .'

"No," he said, "You have got me over a barrel." And he said, "What price are you going to quote?"

"I said that it was not the policy of the du Pont Company to take advantage of such situations and that our price as previously quoted still stood.

"He gave me a contract for the last six months of 1925 and asked me if we would start shipments in June against that contract, which we did.

"Q. The contract provided for shipments to start in July?

"A. As a rule, yes, the last six months of the year. We knew they were in trouble, so we started in June.

"Q. Was this contract for the last six months of 1925 for all of Chevrolet's requirements or for only a part of them?

"A. All of them; a hundred per cent.

"Q. Was anything said at the time they negotiated the contract with you about the two sources of supply instruction?

"A. The only time that was ever brought up as far as I can remember was in 1923. And the 25-75 per cent after that never entered into it at all.

"Q. Did you start making shipments in June under the contracts made for the last six months of the year 1925?

"A. That is right, yes."

[fol. 4738] "Q. Did you take the contracts, the written contracts, for the sale of fabrics to Chevrolet over to O'Keefe for his signature? I am talking now about the general practice during this period.

"A. Oh, no. When they were ready to close, if I got the business, O'Keefe would call me up.

"Q. You would go over to his office though?

"A. I would go to his office. He had the contracts on his desk. And he would sign them there in front of me.

"Q. Then you took the contract and sent it to your home office to be signed?

"A. Yes.

"First I would wire them and tell them we got the business just to relieve their mind.

"Q. What form of contract was Chevrolet using in the middle 1920's when buying from du Pont?

"A. They were using a contract naming a specified amount of each quality.

Q. Specified number of yards?

"A. Yes.

"Q. And did they change later?

"A. Yes. They changed later to — their contract would read 'Covering requirements of (specify the quality and type of material—deck or upholstery) for a period from July 1, 1926' or 1927, whenever it was 'to December 31.'

"And that contract was not at all acceptable.

"Q. Acceptable to whom?

"A. du Pont. —because we didn't know whether they would want a million yards, two million yards, or five hundred thousand yards. And for a set quotation which we would have to give them, we would have to get a quotation on cotton goods.

"Well, cotton goods the 1st of July would be one price and maybe the 1st of November it would be up two or [fol. 4739] three or four cents. So, I asked O'Keefe on more than one occasion if he couldn't give us a contract specifying the number of yards to be delivered over a period. And he told me 'That is the way we are writing up our contracts and covering our requirements. If you don't want to take it, we can find other sources. They will be glad to take it.'

"Q. During what period did you have these conversations with O'Keefe that you have just described? What years, to the best of your recollection?

"A. Oh, I think probably the requirements contract came out about 1926.

"Q. Were you ever able to induce O'Keefe to change the form of that contract?

"A. Never, no. As long as I was still there, it was always the requirements contract.

"Q. Did you continue to try to get him to change it?

"A. Yes. Without success."

"Q. When did Chevrolet first start buying fabrics from du Pont Company?

"A. I don't know. I was still at Newburgh. Offhand, I would say 1913 or 1914.

"Q. When you entered the Detroit office in 1919 was the Buick Motor Car Company buying fabrics from du Pont?

"A. Yes.

"Q. When you came into the office, what percentage of Buick's requirements of fabrics was Buick buying from du Pont?

"A. Not over 50 per cent.

"Q. Did you endeavor to get them to buy a greater [fol. 4740] percentage of their requirements from du Pont?

"A. Always.

"Q. When was the first year you were able to increase the percentage of Buick's requirements that were furnished by du Pont?

"A. Well, any appreciable amount, the first year was in 1922.

"Q. During that year what percentage of Buick's requirements of coated fabrics was furnished by the du Pont Company?

"A. In 1922 we furnished 100 per cent of the top material and 100 percent of the coated fabrics—
'Fabrikoid.'

"Q. Will you state what happened prior to the negotiation of that contract?

"A. Well, it seemed to be quite a little—there was quite a bit of bitterness.

"We had the contract with them in 1920. And then the recession hit and they wanted to cancel. They held up their releases. And they also had a contract that year with Haartz. And they held up Haartz's shipments.

"Then in 1921, they requested an out and out cancellation of the contract which du Pont refused to do stating that they had contracted with the grey goods mills for the cloth, and they would not cancel our contracts nor reduce our price.

"So, before Buick released any of those shipments to us, they released some to Haartz. And they dilly-dallied back and forth—this is between central office and Buick—it didn't go through the Detroit office—on the negotiation for cancellation.

"Sometime during 1921—I don't remember when—du Pont agreed to cancel the 1920 contract providing they gave us a hundred per cent of their requirements for 1922, which they did.

"Q. You negotiated the 1922 contracts?

"A. Yes.

"Q. Was that the first time you ever had a contract with Buick for a hundred per cent of its requirements?

"A. That is the first time and the last time.

"Q. The only time?

"A. Yes.

"At that time Bill LaRocke was the purchasing agent.

"Q. Now, during 1922, from whom did Buick buy its double texture uncoated fabric?

"A. J. C. Haartz. They bought all of their uncoated fabrics from Haartz for several years.

"Q. Did du Pont at that time manufacture a double texture uncoated fabric like the kind that Buick bought from Haartz?

"A. Well, we could manufacture it, and we did for Buick.

"Q. You mean at a later time?

"A. Yes.

"We only manufactured and only sold about 3,000 yards. And that was more or less of a trial order.

"Q. Was that fabric known as 'Teal'?

"A. No, that wasn't known as 'Teal.'

"Q. 'Teal' was a later fabric?

"A. That is right. That fabric was a piece of duck combined to a drill.

"Q. What was it used for?

"A. Tops on open cars.

"Q. Did you attempt to sell that fabric to Buick?

"A. We attempted every time they were in the market, but we never got any business.

"Q. What reasons did they give you for refusing to buy from you?

"A. One reason was because Haartz had always had the business from Buick, and their price was much [fol. 4742] lower than we could meet because it was nothing except two pieces of cloth that du Pont had to buy on the outside and combine it with a cement.

"The only thing connected with the cloth was cement, manufactured by du Pont. So, it wasn't a very profitable business one way or the other. And the only reason we tried to get it was that we tried to get all the business we could from anybody.

"Q. Was this double texture fabric used for the same purpose as your rubber coated top material?

"A. Yes. But it was used mostly on Buick roadsters.

"Q. Now, when did you develop 'Teal'?

"A. Well, I think 'Teal' first came on the market about 1923.

"Q. And what kind of a fabric was 'Teal'?

"A. 'Teal' was a combined fabric. It was a cloth

dyed in the wool. That is, it was dyed before it was woven. And that 'Teal' at the time was black and white, sort of a salt and pepper effect. And that was combined to a drill.

"And I think Buick switched to that from this old duck which was a plain color and faded. I think that was in 1923. For a number of years we tried to get the 'Teal' business from Buick. We were never successful.

"Q. Whom did they buy their 'Teal' from?

"A. Haartz.

"Q. Did Haartz call their fabric teal, or was that your trade name?

"A. That was our trade name.

"Q. Do you remember what Haartz called theirs?

"A. Sport Topping.

"Q. During this period from 1923 and 1924 and 1925, you were continuing to try to sell 'Teal' to Buick?

"A. Every time they were in the market we tried to sell it to them but we never could.

[fol. 4743] "Q. When were you first able to sell them an order of 'Teal'?

"A. I think the first time we sold Buick 'Teal' was when I took samples up there of a brown and white 'Teal' instead of black and white. And I showed it to the sales department and Ken Forbes. Ken Forbes is the body engineer. And they liked the brown and white for a change.

"That was in 1927, I think.

"Q. What reasons did they give you for refusing to buy your 'Teal' from 1923 to 1927?

"A. Well, to be perfectly frank with you, we couldn't match Haartz' price, even if we did match the sample.

"Q. Following 1922, about what percentage of Buick's coated fabrics business did you obtain for the du Pont Company?

"A. I don't think we ever had over 50 per cent of

the Buick business outside of 1922 up until 1927. Then we had, I would say, 75 per cent of the 'Teal' business.

"Q. Now, during this period following 1922 did you attempt to get Buick to buy more than 50 per cent of its coated fabrics requirements from du Pont?

"A. 1922 you say?

"Q. From 1922 to 1929?

"A. Oh, yes. Every time they were in the market we always tried.

"Q. Whom did you talk to?

"A. I talked to LaRoeke from 1920 until I left.

"Q. What did LaRoeke say to you when he only gave you 50 per cent or less of the business?

"A. On the 'Teal' that Haartz got in first, and that they were satisfied with the material, and that they saw no reason to change.

[fol. 4744] "Q. What about the coated fabric?

"A. Let's see; it seems to me in those days that they were buying the balance of the coated fabrics from Chase.

"Q. What reasons did they give for refusing to give you all of that business?

"A. They were satisfied with the source, and they wanted two sources.

"Buick was more conscious about the two sources than Chevrolet was.

"Q: Did you ever try to get the Buick people to use coated fabrics for upholstery?

"A. I did for the first couple of years I was out there until I found out that it was a lost cause.

"They would not consider imitation leather for upholstery in the Buick car.

"Q. With reference to your testimony that you sold Buick about 50 per cent of its requirements of coated fabric after 1922, did you have reference then only to their requirements of coated fabrics for use on open-bodied cars?

"A. That is right.

"Q. Well, then, straighten the record out as to what percentage of the top material you sold to Buick after 1922.

"A. Well, from 1922 to 1927, we did not sell them any 'Teal.' That was all Haartz. We sold them about 50 per cent of the rubber-coated fabrics.

"Q. Then after 1927?

"A. Then we started to sell them 'Teal.'

"Q. And how much of the 'Teal' business did you have? Straighten that out.

"A. I think we had all their 'Teal' business in 1927, 1928, and 1929, and about 50 per cent of their rubber.

"On open cars they didn't use just one material. They used 'Teal' on some and rubber on others.

[fol. 4745] "Q. How were you able to determine the percentage of Buick's requirements that you were furnishing them?

"A. Production basis.

"Q. And how were you able to determine who else was selling them?

"A. LaRocke told me that they were buying from Haartz.

"Q. Was the Cadillac Motor Company buying coated fabrics from du Pont when you went into the Detroit Sales Office in 1919?

"A. They were buying 'Fabrikoid,' but not any rubber.

"Q. Do you know how long they had been buying 'Fabrikoid' from du Pont?

"A. They had been buying 'Fabrikoid' for years. They were buying it when I was in Newburgh.

"Q. When was it that Stark told you that you had always gotten a hundred per cent of Cadillac's 'Fabrikoid' business?

"A. 1919, when we went out to Cadillac. He was telling me about not getting any top material but always getting the 'Fabrikoid.'

"Q. Was that the same occasion when you talked about the top business?

"A. Yes.

"Q. What was Cadillac using du Pont 'Fabrikoid' for?

"A. It was a higher class, higher-priced piece of material. It was a 7600 quality moleskin they were using for their door panels and kick pads.

"Q. Was that use in connection with the manufacture of open-bodied or closed-bodied cars?

"A. All open bodies.

"Q. Who was building Cadillac closed bodies?

"A. Fisher. They only used cloth on the closed bodies for upholstery.

[fol. 4746] "Q. Did you continue to sell Cadillac a hundred per cent of their requirements of 'Fabrikoid' as long as you were with the company?

"A. There was only one year that I didn't get the contract on 'Fabrikoid.'

"Q. When was that?

"A. I think it was the second year I was out there in 1920. The Texti-leather Company, one of our competitors, put in a much lower quotation; and Hulgrave told me what it was. He asked me if I would meet it—not meet it, rather, but lower our price.

"We didn't lower the price; and we lost the business.

"Q. When did you make your first sale of top material to Cadillac?

"A. I think the first order I got from Cadillac on top material was the first year I went there—1919. And it was only for a small amount—a couple of thousand yards or so.

"They wanted to test it. The only reason they considered it at all was that that was the year after we came out with this new special finish.

"Q. Tell us, what was this new special finish?

"A. It was a rubber-coated material with a high lustre which had never been on the market before."

"Q. When did du Pont introduce that new material?

"A. 1918.

"Q. Describe how it was made.

"A. It was a drill, cotton cloth, combined to a sheeting, with a rubber cement and rubber-coated to a finish weight of about 38 ounces and finished with a high lustre varnish.

"Q. What was it used for?

"A. Deck materials.

[fol. 4747] "Q. Did any of du Pont's competitors have a cloth like that?

"A. No, not at that time, not with a high lustre.

"Q. How long was it before a competitor offered a cloth like that?

"A. We were in the lead for about three years—two or three years. And then our competitors came out with a higher lustre. And then about 1924 or 1925, we came out with another one, an improved one. At that time, they called it 'Everbright'. That was a higher lustre and more durable.

"Q. Coming back to the fabric that du Pont introduced—you say in 1918 or 1919?

"A. Well, it happened while I was in Service. So, it was 1918.

"Q. What was the name of that fabric?

"A. 'Pontop.'

"Q. What advantages or disadvantages did 'Pon-

top' have as compared with the deck materials that had been used prior to the introduction of 'Pontop'?

"A. Well, everybody complained of the rubber top material. They complained that the rubber top material would lose its lustre in a couple of months. Everybody knew it. We knew it.

"So, they didn't want it for a high-priced car like Cadillac. They wouldn't even consider it..

"The Hodgman material had a special finish. It wasn't exactly rubber-coated; it was a sort of a—oh, I forget just how they made it. But it held its lustre.

"And up until we came out with a high-lustre material, why, they would not consider us."

* * * * *

[fol. 4748] "Q. Was your material superior to Hodgman's product?

"A. From a standpoint of price, yes; because Cadillac bought this trial yardage—I forget just what it was—two or three thousand yards—and it was so much cheaper than Hodgman that they were reluctant to change at first until they ran their tests on it and it proved to be satisfactory. And from then on, we got a hundred per cent of the business.

"Q. Your first contract, you said, was in 1919. When did you get your second contract?

"A. 1920.

"After they made the sample run or the test on the three thousand yards, or two thousand, whatever it was, we had the business a hundred per cent from then on. At least that was what they told me.

"Q. Did you continue to sell both top material and artificial leather to Cadillac as long as you were with the Detroit Sales Office?

"A. Yes. Dan Hulgrave was the Director of Purchases and Ray Vogel was his assistant."

Mr. Neitzert: Page 70 is next.

"Q. Mr. MacShane, was du Pont selling coated

fabrics to the Olds Motor Company in 1919 when you went into the Detroit Sales office?

"A. Yes.

"Q. What contracts did du Pont have with Olds when you went into the office?

"A. They had adopted the new 'Pontop' rubber for the decks which had come out the previous year. And we sold them a hundred per cent of the rubber.

[fol. 4749] "Q. And what per cent of their requirements of artificial leather?

"A. We never did get a hundred per cent of the artificial leather I don't think until 1922. We were selling only about 50 per cent or less.

"Q. Did you attempt to obtain a contract for a greater percentage of their artificial leather?

"A. Yes.

"Q. When was that?

"A. 1919, 1920—every year.

"Q. To whom did you talk?

"A. When I first went there I talked to a man by the name of Maxson. And he told us that he was buying, I think it was, from Textileather.

"Q. What reason did he give for refusing to give you a hundred per cent of their artificial leather business?

"A. He bluntly stated that they were buying from Textileather, were pleased with their service, and were pleased with their quality, and that they intended to continue to buy from them. Maxson was a pretty tough man to get along with."

Mr. Neitzert: At the bottom of the page—

Mr. Harsha: Will you read the next two questions, please?

Mr. Neitzert: Yes, please.

"Q. How long was he there?

"A. I think he left there in 1920. I don't think he was there over a year after I was there. He went in business for himself.

"Q. Whom did you deal with at Olds after he left?

"A. Charlie LeJeune."

Mr. Neitzert: Is that what you wanted?

[fol. 4750] Mr. Harsha: Yes.

Mr. Neitzert: (Continuing):

"Q. Now, you got a contract in 1920 for a hundred per cent of their top and curtain materials?

"A. Yes.

"Q. Now, what happened to that contract?

"A. Well, Olds was just like all of the other automobile manufacturers; on account of the recession, they asked us to hold up the schedule. And later on, they asked us to cancel it.

"Well, that is the same story as with Buick and the others. The du Pont Company did not want to cancel on account of having committed themselves for a specific number of grey goods—specific yards of grey goods:

"Well, that went on for a year or so, and du Pont finally cancelled the contract with the understanding that they would give us all of their requirements on both 'Fabrikoid' and rubber for 1922, which they did.

"Q. Did you negotiate the 1922 contract?

"A. Yes.

"Q. Is that the first time you ever had a hundred per cent of their 'Fabrikoid' business?

"A. First and only time.

"Q. Did those 1922 contracts cover uncoated fabrics? I am referring now to the Oldsmobile contract.

"A. I don't think—no, in 1922 Oldsmobile did not use uncoated fabrics, if I remember correctly. They were still using rubber top material and 'Fabrikoid.' I don't think they went into 'Teal' until 1923, 1924."

Mr. Neitzert: The top of page 77:

"Q. Now, following 1922, did you attempt to induce [fol. 4751] these purchasing agents at Oldsmobile to buy all of their requirements of 'Fabrikoid' from you?

"A. Yes.

"Q. And what reasons did they give for refusing to do so?

"A. The same reason that Maxson gave—that they were buying from Textileather, I believe it was—I'm sure it was—and they were perfectly satisfied with the material and service, and that they intended to continue to buy at least a portion from them.

"Q. How long after the year 1922 did you have a hundred per cent of Oldsmobile's top and curtain business?

"A. That was the only year I had a hundred per cent."

"Q. When did they start using an uncoated fabric for tops and curtains?

"A. I think Olds was a little later than Buick. I don't think they went into the teal business until about 1924.

"Q. From whom did they buy their teal?

"A. When they first went in, they bought it from us.

"Q. For how long?

"A. I think we had all of their teal business for about two or three years.

"Q. Then what happened?

"A. We lost it to Haartz.

"Q. Did Haartz still have it when you left the company?

"A. Yes."

"Q. I am not sure that I have got the percentage of Olds' requirements of rubber-coated curtain and top material that you sold to them after 1922.

"I have Fabrikoid, but I don't believe I have the rubber goods. What were the facts as to that?"

"A. I think F. S. Carr got the rubber goods. We [fol. 4752] only got about 50 per cent of it; whereas, before 1922, we were getting a hundred per cent of their top material.

"Q. Did you try to continue to sell them a hundred per cent of their requirements?"

"A. Oh, yes.

"Q. And what reasons did the purchasing agents give for refusing to buy more than 50 per cent?"

"A. Well, they wanted two sources of supply. After LeJeune went in and Westover, they were very friendly, which was quite a change from Maxson. But even with their friendship, I was unable to get all of their business."

Mr. Neitzert: At the top of the next page:

"Q. Do you know how long du Pont had been selling coated fabrics to Oldsmobile before you went into the Detroit office in 1919?"

"A. Well, my only recollection is that while I was still at Newburgh I know we were shipping to Olds. I believe that was as far back as 1914. I don't know whether we sold them before then or not.

"It seems to me we had some trouble with them. At the time, we were having difficulty getting fast dyes, and we shipped some top material to Olds and it faded. It was off color. It wasn't a uniform color. And I think we lost all of the business that year.

"Of course, it wasn't only Olds that we had trouble with on the dyes, it was everybody else we were selling to; but Olds seemed to be a little bit more critical.

"Q. What was the matter with the dyes at that time?"

"Mr. Harsha: What time are we referring to, may I ask?"

[fol. 4753] "The Witness: This is about 1916, 1917, or 1918. It couldn't have been 1918, because I was in the Service. It was probably 1916 or 1917.

"By Mr. Neitzert:

"Q. What was the matter with the dyes?

"A. We had to buy dyes here in the United States, and they were not as good as the German dyes. They were not fast. They were just what they called a fugitive dye. And as soon as it was exposed to light, why, it faded.

"Q. You had been using German dyes before the war started?

"A. Yes.

"Q. Did you ever correct that situation?

"A. I think it was about 1917 that the du Pont Company went into the dye business. And it took them a couple of years to get a good fast dye."

"Q. Was the du Pont Company selling coated fabrics to the Oakland Motor Company when you went into the office?

"A. Yes.

"Q. What per cent of Oakland's requirements were covered by your contracts at that time?

"A. I don't think we ever got over possibly a third of their business.

"Q. After you came in to the office, did you attempt to increase the participation of the du Pont Company in this business?

"A. It was always my ambition to sell them a hundred per cent.

"Q. With whom did you deal in the Oakland Company?

"A. When I first went there a man by the name of Jim O'Rourke was Director of Purchases, and his assistant was Eric Hoover.

[fol. 4754] "I think in 1920 Mr. O'Rourke left to become production manager for the Murray Body Com-

pany. Eric Hoover left shortly after that to become purchasing agent for the Franklin Motor Company at Syracuse, New York.

"Q. Who replaced him as purchasing agent?

"A. Charles Miller replaced O'Rourke as Director of Purchases. And Fred Gordon replaced Hoover."

"Q. Coming back to the period 1919 and 1920, what reasons did the Oakland purchasing agents give for not giving you more than a third of their business?

"A. Just like all of the others—they were buying from Chase. They had three sources; I think another was Boston Woven Hose. We never considered them at all a high-class competitor. But, nevertheless, they got some of the business."

"Q. Were you ever able to get 100 per cent of their business—Oakland's business?

"A. Once.

"Q. When was that?

"A. 1922.

"Q. Tell us how that happened.

"A. Well, Oakland seemed to be more bitter than the other General Motors units about our refusal to cancel the contract for the 1920 and 1921 requirements.

"And it seems to me that they got so mad that they sent du Pont a check; because this Fred Gordon used to rub it into me every once in a while—I forget how much the check was for, whether it was in full settlement or whatever it was—but that was before du Pont decided to cancel all of those General Motors contracts.

"Whether the money was refunded, or whether they [fol. 4575] were given credit for it, I don't know. It didn't come under the Detroit office.

"Q. How was that dispute settled?

"A. I think it was in the latter part of 1921 that du Pont agreed to cancel the Oakland contract with the provision that they would buy a hundred per cent of the top materials and 'Fabrikoid' from us during 1922.

"Q. And did you negotiate the 1922 contracts?

"A. Yes.

"Q. Did you sell them a hundred per cent of the top materials and artificial leather?

"A. Yes.

"Q. When you had these conversations that you have referred to with the purchasing agents and solicited their business, did that occur at the offices of the purchasing agent or at your office or where?

"A. At the offices of the purchasing agents.

"Q. Now, about Oakland using 'Fabrikoid'. What were they using for upholstery?

"A. Genuine leather.

"Q. Did you ever attempt to sell them artificial leather?

"A. Yes.

"Q. Were you successful?

"A. No.

"Q. What reasons did they give for not using artificial leather?

"A. Prestige, and from a sales point of view.

"Q. You have given that same answer several times; and I think we might have you explain just a little more in detail what that means.

"What did they mean when they said 'prestige' and—

"A. Well, when the sales department advertises a [fol. 4756] car, they specifically state 'Upholstery Genuine Leather'. And if it was 'Fabrikoid', why, they would have to say, 'Imitation Leather', which did not look too good in print.

"Q. Did they ever indicate that they thought artificial leather would not hold up as an upholstery fabric?

"A. No, I don't believe so.

"Q. It was purely just the sales appeal of having genuine leather upholstery?

"A. Yes. We sold Chevrolet upholstery material for years. Never had any serious complaints.

"Q. After 1922, approximately what percentage of Oakland's requirements of coated fabrics did they buy from du Pont?

"A. After 1922, the year we got the hundred per cent, they gradually reduced. In 1923, we probably got 50 per cent. Then in 1924, 40 per cent. And then we went back to the one-third or 33 1/3 per cent.

"Q. During this period, did you attempt to hold a hundred per cent of the business?

"A. Oh, yes.

"Q. And you had your conversations with whom on that subject?

"A. Both Hoover and Gordon.

"Q. What reasons did they give for this continual reduction in the amount of fabrics that they bought from you?

"A. The same excuse they gave me before they gave us 100 per cent—that they wanted other sources.

"Q. Did Oakland ever adopt the uncoated double texture teal-type decking for a part of its cars as the other companies did?

"A. Yes.

[fol. 4757] "Q. When did that happen?

"A. I think they adopted that around 1924.

"Q. Then after that, they continued to use both the rubber-coated and the teal-type material?

"A. That is true.

"Q. Where did Oakland buy its teal-type fabrics?

"A. From Haartz.

"Q. Were you ever successful in selling them any 'Teal'?"

"A. No.

"Q. Did you try?"

"A. Yes, sir.

"Q. Over what period of time?"

"A. Every year.

"Q. And what reasons did they give for refusing to buy from you?"

"A. They started with Haartz, and they were perfectly satisfied with them.

* * * * *

"Q. Now, also in your testimony——"

Mr. Harsha: Pardon me, may we have the next question?

Mr. Neitzert: Just the next question and answer?

Mr. Harsha: Yes.

Mr. Neitzert: (Continuing):

"Q. Can you estimate what percentage of Oakland's tops and curtains were made of 'Teal'-type material and what percentage were made of rubber-coated materials after they started using 'Teal'?"

"A. Roughly I would say one-third 'Teal', two-thirds rubber. That is a pretty hard question to answer accurately.

* * * * *

[fol. 4758] "Q. Now, also in your testimony concerning your dealings with each of these motor car companies, you have referred to contracts made in 1920 and to contracts made in 1922, but you haven't said anything about any contracts made in 1921.

"What happened in 1921?"

"A. I was still working on the 1920 contracts. We didn't have any contracts in 1921.

"Q. You mean no new contracts were made?"

"A. That is right.

"Q. Was the Scripps-Booth Motor Company buying

coated fabrics from du Pont when you went into the Detroit office?

"A. No, sir.

"Q. What was the Scripps-Booth Motor Company?

"A. When I went there, it was a small outfit—rather high-priced cars. And they were only turning out about seven or eight thousand cars a year. And I called on them with Jay Stark in 1919.

"Q. Whom did you call on?

"A. I don't remember his name.

"Q. Was he the purchasing agent?

"A. He was the purchasing agent.

"Q. Of the Scripps-Booth Motor Company?

"A. Yes. He told us that they were buying 'Pantasote' for the top material; and I believe it was 'Zapon' for the interior trim.

"And I called on them repeatedly up until 1922. Of course, from 1920 on, their production was gradually decreasing. And in 1922, I think, they went out of business. And during the years they were in business and I called on them, I didn't sell them anything.

[fol. 4759] "Q. What reasons did they give for refusing to buy from you?

"A. They were satisfied with 'Pantasote' for the top material and satisfied with 'Zapon' for their interior trim; and they wouldn't change.

"Q. For seven or eight thousand cars a year, how many yards of coated fabrics would they require for top and curtain materials and interior trims?

"A. For the top and curtains, they would use—I don't know whether they made roadsters or not; I don't recall—but approximately 75- to 80,000 yards of top material. That is for the seven to eight thousand production.

"Q. And the interior trim?

"A. Twenty thousand at the most.

"Q. Where was Scripps-Booth's purchasing office?

"A. Detroit.

"Q. Was General Motors Truck buying coated fab-

rics from du Pont when you went with the Detroit sales office in 1919?

"A. Yes, they were.

"Q. Did you call on General Motors Truck?

"A. Yes.

"Q. Where was that purchasing office?

"A. They were located in Pontiac, Michigan, right behind the Oakland Motor Works.

"Q. Who was the purchasing agent over there that you dealt with?

"A. At that time Mr. Creighton.

"Q. And was he there until you left the Detroit office in 1929?

"A. Yes, he was there. He was a purchasing agent until 1925 about, when the Yellow Truck moved to Pontiac. There they had their main offices. And this man from Chicago was made Director of Purchases. I [fol. 4760] think he was also a vice president in charge of purchases. His name was Livingston.

"Q. Did you deal with him then after 1925 with reference to sales to General Motors Truck?

"A. That is right.

"Q. Did you make sales to General Motors Truck during the period 1919 to 1929?

"A. Yes.

"Q. What did they use coated fabrics for?

"A. Upholstery.

"Q. Now, you made reference to the Yellow Truck Company moving to Pontiac in 1925?

"A. I think it was in 1925.

"Q. Did you solicit their business when they moved into Pontiac?

"A. Yes.

"Q. Were you able to sell them any coated fabrics?

"A. Yes.

"Q. When did they start buying from you?

"A. 1925, 1926.

"Q. Did you have all of their business?

"A. No.

"Q. Who else sold Yellow Truck?

"A. When Yellow Truck was in Chicago, they used to buy from Chicago Decorative Leather, I think. And they also bought from them when they came to Pontiac.

"Q. Do you know about what percentage of Yellow Truck's business you had?

"A. Prior to 1925 I think I had all of their upholstery material. They may have bought some small yardage from Chase, I think it was. But they used, for the decks, a plain canvas. We didn't sell them any rubber at that time as I recall. They didn't use any.

[fol. 4761] "Q. How much of the business did you have after 1925?

"A. Oh, probably fifty per cent.

"Q. Did you try to get more of it?

"A. Yes.

"Q. What reasons were you given for not getting it?

"A. Same old reasons: that they had been buying from this source from Chicago before they moved to Pontiac and they intended to continue to buy from them.

"Q. When you went to the Detroit sales office in 1919, was the Fisher Body Company buying coated fabrics from the du Pont Company?

"A. No, sir.

"Q. What business was the Fisher Body Company engaged in at that time?

"A. They were making closed cars for all the General Motors units—closed bodies rather, not closed cars—and some non-General Motors units.

"Q. What did they use coated fabrics for?

"A. Deck material.

"Q. From whom was Fisher Body buying its requirements of deck material when you went with the Detroit sales office?"

Mr. Harsha: Pardon me, could we have the next question read?

Mr. Neitzert: (Reading):

"Q. What did they use for interior trim?

"A. Cloth.

"Q. What did they use for upholstery?

"A. Cloth

"Q. From whom was Fisher Body buying its requirements of deck material when you went with the Detroit sales office?

"A. Textileather Company and Duratex. [fol. 4732]. "Q. Did you call on Fisher?

"A. I did. I first called on them in 1919 with Mr. Stark.

"Q. Whom did you talk to when you called on them with Mr. Stark?

"A. He introduced me to Herb Nye, the body engineer; Fred Walker; and Claude Crusoe. They were the buyers of the fabrics.

"Q. Were you and Stark able to get any business when you called on them in 1919?

"A. No, sir.

"Q. What reasons did these purchasing agents give for not giving you any business?

"A. Well, for one reason, Textileather was represented by the Olson Brothers. They had offices right next to me in the Dime Bank Building. And they were very friendly with the Fisher Brothers. Also with Herb Nye. They had been supplying Fisher for years. The same thing goes for Ralph Allen. He was sales manager for the Duratex Company. He was also very friendly with the Fishers and Nye.

"They had become so entrenched in there that du Pont wasn't given any consideration.

"Q. Do you remember selling them some 66-inch decking at one time—or about that time?

"A. Oh, yes. I remember that very well.

"Q. Tell us about that.

"A. I think they gave us an order, or said that they were giving us an order, for a considerable amount. And we had covered for the cotton goods.

"Before we made any shipments, they decided they didn't want any 66-inch material, and told us to cut it back to 63-inch.

[fol. 4763] "Q. Well; is 66-inch an unusually wide cloth?

"A. Yes, 63-inch was the average.

"Q. If I understand what you said, you had this promise of an order and you bought your cotton goods, and then they refused to take it?

"A. That is right.

"Q. Is that what happened?

"A. They gave us the order for 63-inch, but we had the 66-inch cotton goods on hand.

"Q. Do you know what you had to do with that?

"A. Yes. Cut it down. We had to take the loss on it.

"Q. Do you recall whether that was in 1923 or 1924?

"A. I think that was in 1924.

"Q. Then were you able to get any more business from them?

"A. I think that was the last order we got until we came out with this new Pontop.

"Q. Now, you solicited the Fisher business up until when?

"A. Actively up until 1925.

"Q. Then what happened then?

"A. The du Pont Company hired a man by the name of J. Henry Smith.

"Q. When did he start work?

"A. Latter part of 1925.

"Q. What was his job?

"A. I don't know. I think he was a type of special representative.

"Q. Whose business did he solicit?

"A. Fisher. Fisher is the only one he called on.

"Q. And did he work out of the Detroit office, the same office that you were in?

"A. Yes.

"Q. When did he start soliciting Fisher's business?

"A. Latter part of 1925.

"Q. What happened?

"A. Well, about a couple of weeks or a month after he had arrived there, he got an order for approximately [fol. 4764] 75,000 yards of this new rubber deck material, what we called at the time Everbright, which was an improvement over 'Pontop'."

"Q. Did he continue to get large orders from Fisher?

"A. Yes. And shortly after he got that 75,000 yard order—that was probably October of 1925—I think before the year was out, he got another order for around a hundred thousand.

"Q. And did he continue to get large orders the following year. Just take the first six months of 1926. What happened then?

"A. Yes. He continued to get—well, up until then, up until 1925, Fisher had been using pyroxylin for the decks exclusively. Then, when we came out with this new Everbright, they liked it well enough to use it for decking on all cars below the Cadillac. That was Buick, Olds, Oakland, and Chevrolet.

"I think we continued to sell them in 1926.

"Q. Did you have all of their business the first six months of 1926?

"A. Yes. That was because Textileather did not make a rubber-coated material. And Duratex did not have a quality equal to ours in appearance."

"Q. Did any of du Pont's competitors manufacture and sell a fabric comparable to Everbright at this time?

"A. Well, later on, oh, around 1927, I think it was, Carr came out with one. F. S. Carr. They had a rubber decking that was not any better than ours. But it was comparable."

[fol. 4765] "Q. But until Carr came out with that, were you the only one that had this kind of a fabric?

"A. That is right.

"Q. After Carr came out with a comparable fabric, did other manufacturers also come out with one?

"A. Not during my stay there. They just couldn't match the finish.

"Q. When you came out with 'Everbright,' what companies adopted it for decking material?"

"A. Ford, Chrysler.

"Q. How long after the first six months of 1926 did you continue to have a hundred per cent of Fisher's business?"

"A. I think it was the latter part of 1926. Fisher decided they would go back to pyroxylin for the Buick Motor Company.

"Q. What happened?"

"A. We got an order from them for 63-inch deck material that year. And the following year they were only using rubber on Chevrolet and Oakland I think it was. They were using pyroxylin for decks on all the other General Motors cars.

"Q. From whom were they buying their pyroxylin fabrics?"

"A. They went back to Textileather and Duratex.

"Q. Did they continue to buy their—

"A. If I remember correctly, our sales started to decrease to Fisher from 1927 on.

"Q. They continued to buy their 'Everbright' from J. Henry Smith?"

"A. What we sold of the rubber deck material they bought from us and they bought some from Carr too. [fol. 4766] We didn't get all of their business then.

"Q. Do you know what was the percentage of Fisher's business in coated fabrics that du Pont had by 1928 or 1929—any period in there you want to select?"

"A. Coated fabrics? Are you referring to both rubber and pyroxylin?"

"Q. Yes.

"A. I would say that was probably reduced to 30, 35 per cent.

"Q. Was that the situation when you left the company?"

"A. Yes.

"Q. Now, not referring merely to Fisher but to all of the companies that have been covered in your testimony, please state what your selling arguments were. In general, what was your method of attempting to make sales to these companies when you called on the purchasing agents?

"A. Our ability to make shipments when desired or when required; our quality of goods; and our prices in general, as well as giving service.

"Q. Can you think of anything else?

"A. Also our ability to develop new materials for their approval if they so desired."

"Q. Did you use these selling methods and same arguments when you called on motor companies that were not affiliated with General Motors or that were not General Motors units?

"A. Oh, yes.

"Q. Was there any difference in your sales methods when you were attempting to sell the General Motors [fol. 4767] units and when you were attempting to sell non-General Motors companies?

"A. No. I used the same method.

"Q. When calling on the General Motors sales representatives, did you ever refer to the fact that du Pont owned some of the General Motors stock?

"A. Did they refer to it?

"Q. Did you ever refer to it?

"A. No, no, absolutely not.

"Q. Did they ever refer to it?

"A. Not the General Motors purchasing agents.

"Q. They are the ones I am asking about now.

"A. No.

"Q. Were you ever informed by the General Motors purchasing agents or any of them that they were required or instructed by anyone to buy part of their requirements from du Pont?

"A. No, sir. If they were instructed, I would have gotten more business.

"Q. Were you ever told that you would get—by anyone other than the General Motors purchasing agents—business from the General Motors units because du

Pont owned part of the General Motors common stock?

"A. No, sir.

"I worked just as hard to get General Motors' business as I did to get any other business.

"Q. Did you ever hear about any arrangement between du Pont and General Motors that du Pont would be given 75 or 80 per cent, or any other percentage, of General Motors' coated fabrics business?

"A. No, sir.

"Q. Did you get that much?

"A. No, sir.

[fol. 4768] "Q. Except in 1922?

"A. 1922.

"And the Chevrolet business, I got a hundred per cent of that several times. But that was only one.

"Q. As far as you know, in your negotiations with the General Motors purchasing agents, who, in the General Motors organization, decided from whom the General Motors units would buy coated fabrics?

"A. As far as I know, it was the Director of Purchases.

"Q. Of each individual unit?

"A. Each individual unit.

"Q. Or company?

"A. Yes.

"Q. Is that the man that you dealt with?

"A. That is right.

"Q. And was that true with respect to each General Motors Company or division?

"A. That is right. Although I do know on one occasion in 1925 that when I lost the Chevrolet business, O'Keefe took it up with Mr. Knudsen before they let the business to competitors.

"Q. Is that the only occasion when you——

"A. That is the only one I know of."

The Court: The Court stands recessed for fifteen minutes.

(Short recess taken.)

The Court: Proceed, please.

"Q. You mean that is the only time that you know of anyone going to any one of their superiors about where they were going to buy?

"A. Yes..

[fol. 4769] "Q. Were you ever informed by anyone in the du Pont Company before you started negotiating with these purchasing agents what percentage of the business you could expect to get?

"A. No, no.

"Q. Did you ever have any knowledge about whether you would make a sale or what percentage of the purchaser's requirements you would sell before the deal was closed with the purchasing agent?

"A. No. From the day I put quotations in, I never knew until the day they would call me to tell me that we had the contract or didn't have the contract.

"They wouldn't tell me we didn't have it. I would have to find out from them whether or not I was going to get it. I never knew in advance whether I was going to get the business or not.

"Q. And the contracts that specified the yardage to be delivered as distinguished from the contracts that called for requirements, were they handled in the same way?

"A. Yes.

"Q. And who fixed the yardage figure that appeared in those contracts?

"A. The purchasing agents of the individual units.

"Q. Now, is what you are saying now true of all of the General Motors individual units?

"A. That is true.

"Q. Did you know what that yardage figure was going to be ordinarily before you got the contract back?

"A. No. Because I never knew what their schedule would be.

"Q. Then you could figure up their total requirements on the basis of their published production figures?

"A. That is right."

[fol. 4770] Mr. Neitzert: Then page 116:

"Q. Mr. MacShane, during the period that you were in the Detroit office of the du Pont Company, were you ever successful in inducing the General Motors companies or divisions as a group to buy a larger percentage of their requirements of coated fabrics from the

du Pont Company than they had previously been buying from the du Pont Company; and, if so, will you state on what occasions that occurred?

"A. Does this refer to both the 'Fabrikoid' and the top material?

"Q. Yes.

"A. Well, one of the principal reasons why I was able to persuade the different units to buy more material from us was the development of the new 'Pontop' rubber top material.

"Q. When did that occur?

"A. First year I went to Detroit—in 1919.

"Q. That was developed in 1918; and just coming out when you came there?

"A. That is right.

"Q. Was there any other time when you were able to increase the percentage of the requirements of the General Motors units that came from du Pont?

"A. About the only thing I can remember, if this is relevant, was the 1922 situation.

"Q. You mean the requirements contracts that you got as a result of that 1922 settlement of the 1920 contracts?

"A. That is right. That year we got 100 per cent from all of them.

"Q. That is the second. Now, were there any others?

"A. Well, the next one would be the development of the Everbright finish which was superior to the Pontop. [fol. 4771] "That came out in 1925.

"Q. You supplied a larger percentage of General Motors requirements of coated fabrics after the Everbright decking came out than you did before; is that right?

"A. That is true.

"Q. Now, was there any other occasion?

"A. I say that is true. That is true in this sense: because up until we produced the 'Everbright' finish, Fisher Body had been using pyroxylin. Then when J. Henry Smith came with the company in 1925, he persuaded the Fisher Body to replace the pyroxylin top

material they had been using with the 'Everbright'. That increased the volume considerably.

"Q. You have testified about that in connection with your testimony about Fisher. You are now referring to the same thing, aren't you?

"A. Yes, sir.

"Q. Now, was there any other time while you were with the company when you were able to induce the General Motors units to increase the percentage of their requirements that they took from du Pont?

"A. Well, as the years went by, the individual units were buying less.

"Q. I am talking about the percentage of their requirements, not the volume.

"A. I see. Not until 1927.

"Q. What happened then?

"A. That was the first year I was able to sell Buick 'Teal'. 1927 and 1928 and 1929.

"Q. So when 'Teal' came out, you were able to increase—

"A. Increase the percentage sold.

"Q. To Buick?

"A. Yes.

[fol. 4772] "Q. Were those all of the occasions you were able to increase your sales to the General Motors units in the period you were with the company?

"A. Yes.

"Q. When you entered the Detroit sales office in the spring of 1919, did your duties include servicing any contracts that had been made with the Ford Motor Company?

"A. Yes.

"Q. What kinds of coated fabrics were being delivered to Ford at that time pursuant to those contracts?

"A. The rubber top material, and the 'Fabrikoid' 6000 quality of the sateen for upholstery and interior trim.

"Q. In general, were these large contracts or small contracts?

"A. Large.

"Q. What use did Ford make of these fabrics?

"A. The rubber material was used for tops and curtains.

"Q. And the 'Fabrikoid'?

"A. The 'Fabrikoid' was used for upholstery and interior trim.

"Q. Was Ford making any of its own coated fabrics at that time?

"A. When I went to Detroit they were just building a plant.

"Q. What kind of plant was that?

"A. For pyroxylin coated materials.

"Q. When did that plant go into production?

"A. I believe it was the following year, 1920.

"Q. Did that cut down the quantity of fabrics that Ford bought from du Pont?

"A. Yes.

"Q. Did Ford continue to buy fabrics from du Pont during 1919 and 1920?

"A. Yes."

[fol. 4773] Mr. Neitzert: At the bottom of page 124:

"Q. When, after 1922, were you able to make your first sale of rubber coated materials to Ford?

"A. It was a couple of years after—1924.

"Q. And were your sales after 1924 of rubber-coated goods to Ford substantial or were they insignificant in amount?

"A. Well, they changed their method of buying. At one time they were buying for the entire year. Then they changed over to a six months period.

"I believe in 1924 it was substantial in comparison with what we had sold them, but not as far as their production was concerned. We only sold them about a hundred thousand yards, I guess.

"Q. Then what happened when 'Everbright' came out?

"A. We did not sell 'Everbright' to Ford until—they

cancelled the order for pyroxylin; they were still using 'Pontop' in 1925. That was before it was really put on the market. In 1925 we sold them a substantial yardage of 'Pontop.'

"Q. And in 1926, what happened?

"A. We also sold them a substantial yardage.

"Q. Was that when they adopted 'Everbright'—in 1926?

"A. No. They did not go to 'Everbright' until after we got the order for pyroxylin. That was in 1928.

"Q. What happened then?

"A. We continued to sell Ford 'Everbright' up until the time I left there; they were still selling them.

"Q. Did you have a hundred percent of the top business when you were selling them 'Everbright'?

"A. I doubt it.

[fol. 4774] "Q. Were your sales substantial?

"A. Very substantial.

"Q. How did your volume or yardage of 'Everbright' sold to Ford compare with your volumes of 'Everbright' sold to Fisher during these years?

"A. That would be from 1918 to 1928?

"Q. Yes.

"A. We sold more to Ford than we did to Fisher."

Mr. Neitzert: Then the top of page 129:

"Q. Did you solicit business from the Ford Motor Company in the same way that you solicited business from the various General Motors companies and divisions?

"A. Yes, sir.

"Q. Was there any difference in your approach?

"A. No.

"Q. When you went to the Detroit office in 1919, did you have any occasion to service deliveries under contracts to Willys Overland?

"A. Yes, I did.

"Q. What type of fabrics were covered by those contracts?

"A. We were selling them only top material—rubber.

"Q. Were they substantial contracts?

"A. Yes, they were.

"Q. What kind of rubber goods was this?

"A. It was double texture regular drill, with a sheeting backing.

"Q. Was this the 'Pontop' that we came out with in 1918 and 1919?

"A. Yes.

[fol. 4775] "Q. By 'we', I mean the du Pont Company.

"A. That is right.

"Q. Do you know whether you had all of their business or not?

"A. I believe we had all of the business on top material in 1919 when I went there.

"Q. Did you continue to sell them all of their requirements of top material?

"A. No.

"Q. When did you lose the business or part of it?

"A. Well, during the recession of 1920, Willys Overland was in pretty bad financial straits. And I never put too much effort trying to get any business while they were in that position, because I knew if we did, why, I would have to ask them to have it shipped C.O.D."

Mr. Neitzert: Then the top of page 133:

"Q. When was the Chrysler Company formed?

"A. Chrysler went down and took Willys Overland over in 1920. And he was there a couple of years. And then he came up to Maxwell-Chalmers Motor Company. And they were in financial straits, and he straightened them out. And he took over the whole works in 1925 I think it was.

"And then it became the Chrysler Motor Company.

"Q. Did you solicit their business at that time?

"A. Yes.

"Q. To whom did you talk?

"A. Well, in the early days there was a man there they called Colonel Downey. He was with the old Maxwell regime. And I never sold him any though. And there was also a man by the name of Raleigh.

[fol. 4776] "Q. When did he come?

"A. I think Raleigh came around 1926 or 1927.

"And the first order we got from Chrysler was for 'Teal' deck material.

"Q. When was that?

"A. I believe that was in 1927. It may have been in 1926, but I think it was 1927.

"Q. Do you know whether you continued to sell fabrics to Chrysler after that?

"A. Yes. We sold them in 1927. Before that, Haartz had been selling them. And in 1928, Haartz got the business back.

"They were considerably under our price. And we got a sample of the material that Haartz was supplying and sent it into Fairfield to be analyzed and tested. And it proved not to be a fast dye. It was a fugitive dye as against the fast dye that we had sold them the previous year.

"So Nickowitz came out to Detroit, and we went over to—

"Q. Who was Nickowitz?

"A. He was our chemist at the time in Fairfield.

"And he went over to Chrysler with Jim Tomlinson—Tomlinson was working in our office at that time—and they ran the same test at Chrysler, and proved to Raleigh that it was a fugitive dye.

"So then we regained the business; we still had it when I left.

"Q. I believe you have already testified that when Everbright came out; Chrysler started using that?

"A. Yes.

"Q. Did you call on Chrysler in connection with these sales of Everbright and 'Teal'?

"A. Yes. I had called on Dodge—I had called on [fol. 4777] them for years. And Dodge was taken over by Chrysler in 1928. That is when they used our Everbright.

"Q. Did you use the same sales approach to Chrysler that you did with the General Motors companies?

"A. Yes, sir.

"Q. Any difference in your selling methods?

"A. I only had one method.

"Q. Did you have all of Chrysler's business?

"A. No.

"Q. Did you try to get it all?

"A. Yes.

"Q. What reasons did they give for not giving you all of their business?

"A. They wanted two sources.

"Q. Do you know about what percentage of Chrysler's business you had during these years?

"A. I guess we had probably 75 per cent."

"Q. Now, did you solicit the business of the Durant Motor Company while you were in the Detroit office?

"A. I did.

"Q. Over what period of time did you do that?

"A. I think they built the plant in Flint in 1919. The purchasing agent there was Roy Heurlich.

"Q. Is he the one you did business with and had your conversations with?

"A. That is right.

"Q. Were you able to sell him any coated fabrics?

"A. No. We were very friendly, both inside the office and out; and he intimated to me that there was not any possibility of my getting any business from Durant.

[fol. 4778] "Q. Did that attitude on the part of Durant later change?

"A. Not until they got in trouble. That was about 1922.

"Q. And they started buying from you then?

"A. Well, Roy Heurlich called me up one morning. I was still in the Dime Bank Building. And he asked me if I could help him out. He said they would have to close down at noontime if they did not get some top material.

"So I had been selling another customer who made automobile trunks with a heavy moleskin covering down at Wyandotte. And I asked them if I could borrow or buy back about 600 yards of their material. They told me I could.

"So I called Heurlich and told him I could pick it up. I drove to Wyandotte, and they loaded it in my car.

And Heurlich drove from Flint into Birmingham—that is about halfway—and met me with his car. We just transferred the material from one car to the other.

“So later, the next time I called on Heurlich, he told me that he had told the president, a Mr. Holler, about the services that we had rendered for them. He had told him that those services had kept the plant open. And Holler told him that any time in the future that they were in the market for any top material to give us every consideration.

“Q. What happened after that?

“A. We got some business.

“Q. Did you solicit the business of the Packard Motor Company while you were in Detroit?

“A. Yes.

“Q. Did you get any of their business?

“A. Yes.”

[fol. 4779]. “Q. Did you get substantial business from them?

“A. Yes. I got, I think, probably 75 per cent of their interior trim.”

Mr. Harsha: Would you read the next question, please, just preceding the exchange.

Mr. Neitzert: (Reading):

“Q. Did they adopt ‘Everbright’ when it came out?

“A. No.

“Q. And did you continue to get their business as long as you were in Detroit?

“A. Yes.

“Q. Who made closed bodies for Packard?

“A. Murray Body.

“Q. Did you solicit Murray Body?

“A. Yes, I solicited and sold Murray Body.

“Q. Did you get a substantial amount of business from Murray Body?

“A. Yes.

"Q. Did you continue to get it all the time you were in Detroit?

— "A. Yes, sir.

"Q. Did you solicit the business of the Graham Motor Company?

"A. Yes.

"Q. Were you successful in getting business from them?

"A. Yes. I got a little business from them.

"Q. Over what period did you sell coated fabrics to Graham Motor Company—or the Graham-Paige Company?

"A. Well, I think the last I sold them was just before I left Detroit, in 1928. I sold them substantial quantities of 'Teal' to be shipped directly to Briggs.

[fol. 4780] "Q. Did Briggs build their bodies, their closed bodies?

"A. No. This was for open cars.

"Q. When did you first start selling to Graham? Or making sales to Graham, I mean?

"A. Oh, I think some small yardages early in the 1920s.

"Q. Did you make—

"A. I never got the majority of the business from Paige.

"Q. You did not have the majority of it?

"A. No.

"Q. Did you have a substantial amount of it?

"A. Yes, I had a substantial amount of it.

"Q. Did you try to get all of it?

"A. Naturally.

"Q. What did they say about that?

"A. They had been buying from one source for years, and they continued to buy from them.

"Q. Now, did you solicit the business of other and smaller automobile manufacturers?

"A. I solicited the business of every known manufacturer out in that district.

"Q. How long were you in Mr. Kniffen's office working with him?"

This is the cross examination by Mr. Harsha. I have a few excerpts of the cross I want to read:

"Q. How long were you in Mr. Kniffen's office working with him?"

"A. From January until August of 1917.

"Q. You went into the Service at approximately what time? I mean the Armed Services?"

"A. September—I left in August 1917; and I went into Service September 1917.

"Q. And you were in Service until when?
[fol. 4781] "A. Until January 1919.

"Q. Do you recall conversations with either Tatum or Stark in which they would inform you: 'Yes. Today I landed the contract for the entire requirements for Chevrolet' for example?"

"Would you have conversations of that sort?"

"A. Yes. Stark and I were very close. We discussed practically all of the business.

"Q. Did you ever know a man by the name of C. Hallock Silkman?"

"A. He was sales manager of the New York office when I was at Newburgh.

"Q. What was the division of function between the New York office and the Detroit office on sales?"

"A. In New York, they just covered the State of New York and Jersey, I believe. It was just a branch office of the central office.

"Q. Were they also selling to General Motors units from the New York office?"

"A. No, they didn't sell the General Motors unit. When they bought in New York City that was handled direct by the Sales Department. Either from Newburgh or from Wilmington.

"Q. Did you know a Mr. Burckel?

"A. Burckel?

"Q. J. A. Burckel.

"A. The name sounds familiar, but I can't place him.

"Q. Your answer is that you cannot place him?

"A. I can't place him, no.

"Q. Did you know a man by the name of Mr. Earle Clark?

"A. No.

"Q. Never heard of him?

"A. Never heard of him.

"Q. Did you know that General Motors was sending information on its purchases directly to the du Pont [fol. 4782] Company in 1920?

"A. No. General Motors was sending information on their purchases in 1920?

"Q. To the du Pont Company; what it was was information showing where the business was placed. Did you know that?

"A. No. I would imagine that would have been through Stark. I didn't know General Motors sent it direct.

"Q. You do not recall ever seeing any reports of that nature?

"A. No.

"Q. Did you know a man by the name of Mr. C. O. Terpenning?

"A. Yes.

"Q. Did you know him?

"A. Yes. He was at Newburgh.

"Q. What was his position?

"A. He was a clerk, correspondence clerk, on automotive sales.

"Q. Was he under your jurisdiction when you were office manager there?

"A. No. He didn't work for du Pont then.

"Q. He came in after you left?

"A. Yes, after I left.

"Q. I want to show you an exhibit which was introduced at the trial as Government's Exhibit No. 297, on the stationery of the du Pont Fabrikoid Company.

"It is a letter dated July 12, 1918, addressed to Mr. J. A. Haskell, in care of the Chevrolet Motor Company, New York City. And it is signed: du Pont Fabrikoid Company, per C. O. Terpenning.

"He states that: 'We attach hereto report of General Motors units for month of June showing unfilled yardage June 1st, yardage placed during June, yardage shipped during June and unfilled yardage as of July 1st. Also Report showing competitive Sales to June 30th.'

[fol. 4783] "And I ask you whether you have ever seen a report similar in nature to that.

"A. Never have.

"Of course, this happened in 1918. But I never saw any previous or subsequent reports."

"Q. I believe you testified that until the spring of 1923 all of the purchases by Chevrolet were made in New York; is that correct?

"A. That is true.

"Q. Now, when you say they were made in New York, was that arranged between the New York office of Chevrolet and the New York office of the Fabrikoid Company?

"A. No, it was the New York office of Chevrolet against the Sales Department in Newburgh. I don't think any of the salesmen connected with the New York office ever call on Chevrolet."

"Q. Mr. MacShane, I want to ask you some questions now concerning your testimony on direct examination regarding sales by the du Pont Company, Fabrikoid Division, to the Buick unit of GM.

"On your direct testimony, I believe you stated that in 1919 when you reported to the Detroit office, Buick bought approximately 50 per cent of its requirements from du Pont.

"Can you state whether that referred to both rubber and Fabrikoid?

"A. That is right."

"Q. Now, did the percentage of requirements supplied by du Pont to Buick change in 1920, if you recall?

"A. No. It was about the same in 1920 as it was in 1919.

"Q. And how about 1921? Do you recall?

[fol. 4784] "A. Well, 1921 was a bad year. 1920 was the recession. And whatever they used in 1921 was from the contract that was negotiated in 1920.

"Q. That was a carry-over from the previous year?

"A. Yes.

"Q. They were still drawing against the contract requirements of the 1920 contract?

"A. That is right.

"Q. Now, are you sure in your own mind that du Pont was not supplying the full requirements of Fabrikoid in 1920 to Buick? Is your recollection clear on that?

"A. My recollection of Buick is that we did not supply them a hundred per cent at any time except in 1922.

"Q. I would like to show you Government's Trial Exhibit No. 420."

"Does that refresh your recollection at all concerning that particular period of time?

"A. No. I don't know where these figures came from, or who compiled them; but my recollection—and I have a pretty good memory—is that I do not think I ever sold Buick a hundred per cent except in 1922.

"Q. I would like to show you Government's Exhibit 460, which was introduced at the trial of this case and which is a memorandum dated January 27, 1927 written by Lamot du Pont to Messrs. P. S. du Pont and J. J. Raskob.

"Q. Isn't it true that in 1928, du Pont sold Buick [fol. 4785] all of its requirements of 'Fabrikoid'?

"A. Not to my recollection it is not."

Mr. Neitzert: Then over on bottom of page 190:

"Q. Well, now, do you recall whether you supplied any of the rubber-coated fabric requirements of Buick during the last half of 1925?

"A. Yes. We got about 50 per cent of the rubber, but we did not get any of the 'Teal.'

"Q. And do you recall whether you supplied any rubber-coated fabrics to Buick for the first half of 1926?

"A. About 50 per cent.

"Q. Now, in regard to your testimony on Oldsmobile, I believe you stated that here again, as in Buick, following the difficulty on the cancellation of 1920 contracts, du Pont got the entire requirements of Oldsmobile in 1922?

"A. That is right.

"Q. I believe you also testified that was the only time that du Pont had a hundred per cent of the 'Fabrikoid' business.

"A. That is true.

"Q. Do you have any explanation for the fact that Oldsmobile is shown in this Exhibit No. 460 as buying none of its 'Fabrikoid' other than from du Pont?

(Document handed to the witness.)

"A. I don't know where they got these figures, but I cannot agree with them, because they were still buying from Textileather.

"I know I never sent in a report stating that I was getting a hundred per cent of the business.

[fol. 4786] "Q. During the period that you were in the Detroit office, would you say that du Pont had a reputation as being a high-priced firm on 'Fabrikoid' and rubber-coated fabrics?"

"A. I would not say high-priced; I would say high-class.

"Q. Well, I am talking about price.

"A. No. We were in line with some of the better manufacturers such as Chase, Zapon, Carr, Haartz.

"And then we get down to Boston Woven Hose, Heath, and O'Bannon. They were noted for a cheaper quality than du Pont.

"Q. Did you ever hear of an outfit called Federal Leather?

"A. Yes.

"Q. What kind of products did they make?

"A. They made a good imitation leather. But they were a very small concern.

"In fact, I understand that they did not even get any business to amount to anything until Ralph Allen, who used to be sales manager for the Duratex Company, went with them. And he sold some Federal Leather to Fisher Body.

"Q. Was it a high quality leather, artificial leather?

"A. Yes. High quality, small production.

"Q. What would you characterize as a large price differential per yard on 'Fabrikoid'?

"A. Five cents.

"Q. Five cents is a large difference in price between competing firms in this field?

"A. Yes. There were cases where it can go as high as 10 or 15 cents lower.

"Q. Would a differential of 11 cents be considered rather extraordinary?

"A. Yes.

[fol. 4787] "Those sound like quotations when some competitor wanted to get his foot in the door.

"Q. Do you recall an incident in 1926 covering the contract period for the first half of 1927 when du Pont got the 'Fabrikoid' business of Buick, although their prices were 11 cents a yard higher than Federal Leather?

"A. That could be possible, because Federal Leather

could not be relied upon to meet Buick's requirements. They were not large enough.

"Mr. Neitzert: He asked you if you remembered it.

"The Witness: No, I do not remember that specific case.

"By Mr. Harsha:

"Q. Now, on your testimony concerning GM Truck, I believe you said that about 1925 the Yellow Truck was combined with GM Truck; is that correct?

"A. That is correct.

"Q. And am I correct in assuming that the purchases for what had been Yellow Truck and also, GM Truck were now unified?

"A. That is right.

"Q. Unified purchasing?

"A. Yes.

"Q. You stated, I believe, that beginning somewhere about 1925 or 1926, du Pont sold fabrics to Yellow Truck.

"Q. Do you recall that?

"A. Well—

"Q. My question is: do you recall what kind of fabrics? I don't think that on your direct testimony you were clear on that.

"A. That is coated fabrics—"Fabrikoid".

"Q. How about rubber-coated?

"A. We did sell them some rubber; but they were [fol. 4788] using a lot of canvas for their big trucks. We did not sell any of that.

"Q. In that period 1925 to 1926, did you sell them all of their requirements of 'Fabrikoid'?

"A. No.

"Q. Do you recall what proportion of the business you had?

"A. I don't think I had over 50 per cent—40 to 50 per cent—of the fabrics business.

"The same applies to the rubber business from the time that the Yellow Truck came to Detroit. That is from 1925 on.

"Q. On upholstery you had all the business though, did you not?

"A. Yes. You mean up to 1925, or beyond 1925?

"Q. I meant after.

"A. After 1925 we did not get all of it. Chicago Decorative Leather got some of it.

"Q. Did you remember the relative proportions?

"A. 50-50.

"Q. Are you sure?

"A. No, not positive about the percentage. But it is approximately 50 per cent.

"Q. Now, you ceased calling on Fisher after 1925; is that right?

"A. That is right.

"Q. That is when this J. Henry Smith was brought in as the special representative; is that right?

"A. That is right.

"Q. Did you keep in touch with the sales that du Pont was making to Fisher, nevertheless, after that period?

"A. Yes.

"Q. That is after 1925?

"A. That is right.

"Q. You did?

"A. Yes.

"Q. Did you see the contracts let?

"A. I saw copies of the orders.

[ffols.4789-4796] "Whenever we got an order in the Detroit office we always made copies of it and sent the original into Newburgh.

"Q. Did you ever hear of a meeting of Mr. W. P. Allen who was the General Manager, I believe, of your Cellulose Products Division, with the Director of Purchase, Mr. Main, and the Assistant Director of Pur-

chase, Mr. Lynah, and J. L. Pratt, and Mr. O'Keefe and Mr. Hulgrave in Detroit in about 1923 regarding the percentage of the business which du Pont could sell to GM?

"A. Yes, I heard of the meeting.

"Q. From whom did you hear of the meeting?

"A. I think it was O'Keefe.

"Q. Did he tell you about that meeting.

"A. Yes, that is the time that he told me they had to have two sources and they would not give us over 75 per cent of the business. And I also knew Jim Lynah.

"Q. Were you informed by Mr. O'Keefe or Mr. Lynah that you were to get 80 per cent of the business?

"A. Oh, no, I was never informed by anybody that we would get any certain amount of business. The only thing that I was ever informed of was that O'Keefe told me we would not get over 75 per cent of the business, whether we would get 50—

"Q. Did you know Mr. Allen, your General Manager?

"A. Oh, yes, very well.

"Q. Did he ever tell you about that meeting?

"A. No.

Mr. Neitzert: That is all of the deposition that I care to read, your Honor, at this time.

[fol. 4797] Cross Examination.

Turning to page 170, in the middle of the page:

"Q. Was there a trade rumor at that time that because of du Pont's purchase into the General Motors Company that the business would go to du Pont?

"A. I wouldn't say it was a rumor; it was more of a feeling.

"Q. Do you think that feeling led to the lower prices quoted by your competitors?

"A. I am sure it did.

"In one instance in Chevrolet in 1925, I always had the feeling that those three competitors that took the business were sorry for themselves for taking it or putting in such a low quotation."

Turning to page 171:

"So, it is not true that you had the 'Fabrikoid' contract supplying Chevrolet's requirements of 'Fabrikoid' from the last half of 1923 to 1925?"

"A. That is right.

[fol. 4798] "Q. Didn't you have the 'Fabrikoid' contract from 1925 until the time you left the Detroit office for Chevrolet's requirements?"

"A. That is right."

Turning to page 175:

"Q. Now, I believe you testified, or have already covered the fact, that you got the rubber-coated fabrics contract for Chevrolet for the last half of 1923.

"A. That is right.

"Q. That was your first contract?"

"A. Yes.

"Q. And that was for the entire requirements of Chevrolet?"

"A. Specified quantities.

"Q. Were you informed as to whether that was the total requirements purchased by Chevrolet?"

"A. Yes, that is right, both on 'Fabrikoid' and top material.

"Q. That was their total requirements of both 'Fabrikoid' and rubber-coated fabrics?"

"A. Yes.

"Q. That was the last half of 1923.

"A. That is right.

"Mr. Neitzert: Are you talking about the last half of 1923? What was the witness' answer?"

"Mr. Harsha: He said 100 percent of their total requirements, I believe.

"The Witness: No; wait a minute; that was the year I only got 75 percent—in 1923—75 percent of rubber. That was when they first came out with this two sources of supply business.

"By Mr. Harsha:

[fol. 4799] "Q. Now, you stated that you did not get the top materials business for Chevrolet in the first half of 1924 because your prices were high; is that substantially what you testified to?

"A. That is right.

"Q. Do you recall how much higher your price was than that of your two competitors who got the contract—O'Bannon and F. S. Carr?

"A. I don't recall the exact price differential.

"Q. Were you substantially higher?

"A. Yes. It was so high that we could not consider it."

I believe there, Mr. Neitzert, the witness, MacShane, asked that the "we" be changed to "they."

So, let the answer read:

"It was so high that they could not consider it."

"Q. Now, you got the rubber contract for the last half of 1924; did you not?

"A. Yes.

"Q. Rubber-coated fabrics contract.

"A. That is right.

"Q. Were your prices in the last half of 1924 lower than those that you had submitted on the previous bid?

"A. I believe it was about the same.

"Q. About the same price?

"A. Yes.

"Q. Do you know whether Carr and O'Bannon underbid you on that last half of 1924?

"A. I don't know what their quotations were; but I know that Chevrolet had trouble with the material breaking.

"Q. The material was inferior. Your competitor's material was inferior?

"A. That is right.

[fol. 4800] "Q. Who got the rubber-coated fabrics part of that contract for the second half of 1924?

"A. Carr.

"Q. How do you account for the fact that for the first half of 1925, Carr also got part of the contract for Chevrolet on the rubber-coated materials?

"A. Carr, Heath, and Haartz. They were lower than they were on the first half of 1924; considerably lower. And we would not meet the competition. We wouldn't lower our final quotation.

"Q. Had the quality of their product changed in that year?

"A. To me, it looked worse. That is when we had to come to Chevrolet's rescue.

"Q. Now, after that period for the first half of 1925 when Heath, Haartz, and Carr were the suppliers for Chevrolet's rubber-coated fabrics, du Pont got the Chevrolet requirements thereafter, did they not?

"A. That is true.

"Q. Up until the time that you left the Detroit office?

"A. Yes.

"Q. Which would be for, say, the first half of 1929?

"A. That is right, yes.

"Q. Did the rubber-coated fabrics contracts bulk larger in dollar volume than the artificial leather contracts?

"A. Yes."

Mr. Harsha: That is all, your Honor.

Mr. Neitzert: Your Honor, I should like to offer in evidence an exhibit which I missed when I was offering my documentary case, and I ask that this exhibit be marked and received as Defendant's Trial Exhibit DP-328.

[fol. 4801]. (Said document, so offered and received in evidence, was marked du Pont Exhibit No. 328.)

Mr. Neitzert: May I hand you a copy for your book?

Mr. Cox: May it please the Court, with the Court's permission, before calling the next witness, I should like to make a very brief statement about the line of proof that is to follow.

The Court will perhaps remember that, when Mr. Wil-

liams was testifying a week or ten days ago about the sale of automotive paints to General Motors, he testified that he sold all of the divisions of General Motors except three—the three divisions being Frigidaire, Electro-Motive, and Packard Electric.

Our next line of proof has to do with the sales made by du Pont to those three divisions. I had intended to begin this line of proof with witnesses from the Frigidaire Division who would describe their activities in selling finishes to Frigidaire Division of General Motors. Unfortunately there is a witness who will testify on another aspect of that question who can be in Chicago only today.

He is in the employ of another company, and that is to say not du Pont or General Motors, and it will therefore be necessary for me to depart somewhat from an orderly and logical order of proof, and call that witness first.

I make that statement, your Honor, so you will understand why it is done that way.

We call Mr. Knight.

[fol. 4802] J. L. KNIGHT, called as a witness on behalf of the Defendants, having been first duly sworn, was examined and testified as follows:

Direct Examination.

By Mr. Cox:

Q. You are J. L. Knight?

A. Yes.

Q. Where do you live, Mr. Knight?

A. In Louisville, Kentucky.

Q. What is your occupation at the present time?

A. I am Manager of Engineering of the Major Appliance Division of the General Electric Company.

Q. How long have you held that position?

A. Since early 1951.

Q. What position did you hold, if any, in General Electric before 1951?

A. I was assistant manager of Engineering of the Appli-

ance and Merchandise Department of the General Electric Company.

Q. Now, what were your duties when you held that last position?

A. Well, this was when I was in an overall capacity of the Appliance & Merchandise Department. This is after I was in the Refrigerator Department in Erie.

Q. And prior to that time, had you been employed in the Refrigerator Department in Erie?

A. Yes, as manager of Engineering of that department.

Q. How long did you hold that position?

A. Oh, since I was manager of Engineering, since about 1946.

Q. And had you been at Erie before that?

A. Yes, I was at Erie starting in 1931.

Q. Now, what were your duties in 1931 in Erie?

A. I was in charge of the Refrigerator Cabinet, Design, [fol. 4803] Development, and Engineering Supervision of Manufacturing, and in charge of the laboratory activities which was responsible for the selection of materials and processes.

Q. Now, you say you are responsible for the selection of materials.

Did you have any responsibility with respect to the selection of finishes for the cabinets for the ice boxes?

A. Yes.

Q. What were your responsibilities in that respect?

A. It was my job to review the results of laboratory and field tests, and to act as the final judge of what materials we were to use in our production.

Q. Do you now have any duties with respect to the finishes that are used on cabinets of refrigerators that General Electric makes?

A. No, except in a very general sort of way. I am on an operation staff now; not in the operating position.

Q. Do you know by reason of your position with General Electric whether the General Electric is now buying any finishes from the du Pont Company?

A. Oh, yes.

Q. What kind of finish does it now buy from du Pont?

A. We buy a "Dulux" for use on our household refrigerators and our food freezers.

Q. Is that a top coat that you are speaking of?

A. That is both top coat and prime coat.

Q. What kind of material is that? Specifically, is it a nitrocellulose or a pyroxylin material?

A. No, it is not. It is a synthetic resin type of material which requires a high bake.

Q. Can you tell us when General Electric first began to [fol. 4804] use this "Dulux" finish on its refrigerators?

A. Yes, we started using it in production in 1932.

Q. What kind of a finish were you using before that date?

A. Nitrocellulose material.

Q. Do you know what company manufacturing refrigerators first used "Dulux" as a finish for its refrigerators?

A. I believe the General Electric Company.

Q. Did General Electric use that finish before Frigidaire did?

A. I believe so. I am quite sure they did.

Q. What is the basis of that answer, Mr. Knight?

A. Well, it was our practice, and still is, each year to purchase samples of our leading competitors' products, and I remember rather distinctly that the samples that we purchased did not have "Dulux" on them.

Q. Now, do you recall any of the circumstances surrounding the adoption of the "Dulux" finish by General Electric?

A. Oh, yes. In the early 30's or in 1930 and 1931, we were very vigorously seeking a material for the finish of refrigerators better than the nitrocellulose materials which were available and which we tried from the various sources. We had a very extensive testing program under way on the various kinds of finishes in an effort to get one which was much better than the one we had, and it was at that time that the du Pont Company submitted samples of this very new material, "Dulux", to us. We subjected these samples to laboratory tests, and it looked so good from a laboratory standpoint that, in July of 1931, we made several hundred refrigerators finished with this new material and

put them into the field for actual test under field conditions. Then, about a year later, we made surveys of these refrigerators finished with "Dulux" in the field, and found them [fol. 4805] to be very substantially better than the nitro-cellulose finished refrigerators; and, since we were so eager to get a much better finish, we insisted on putting the "Dulux" into production, even though the du Pont people weren't quite ready to go. We put this material into production though, and our field troubles largely disappeared.

Q. What part did you personally take in this activity? Were you engaged yourself in the testing, and that sort of thing?

A. Yes. This preliminary testing work was always done in our laboratory, and I inspected the panels, the test panels that were subjected to various sorts of humidity and various other kinds of tests.

I followed very closely at that time this testing in the laboratory, and then initiated the application of this material to the several hundred samples for field tests.

Then the engineers under my direction went to the field and actually inspected these in the field, in the customers' homes.

Q. Did any representatives of the du Pont Company work with you in this enterprise?

A. Oh, yes. The technical service from du Pont, in adapting this material to our processes and working out the production bugs that a new material of this sort has, was invaluable.

As a matter of fact, I well remember Peters and Jim Bullett and Hopkins—those are three names that occur to me—who were from the du Pont Company and who worked with our production and laboratory people in adapting this material to our processes.

Q. Did they do that work in your plant and in your laboratory?

A. Oh, yes.

[fol. 4806] Q. Now, at this time while you were carrying on this work with the du Pont Company, were you carrying on any similar work with other manufacturers of finishes?

A. Well, we had been testing the materials of quite a

number of other manufacturers of the nitrocellulose variety. It was several years, though, before any "Dulux"-type materials were ever brought out by any competitors. They were working largely on the nitrocellulose type of material.

Q. In this period that you are speaking about, which I understand is, roughly, 1931 and 1932, were you working with any other manufacturer on a synthetic finish of any kind?

A. No.

Q. Did the time come then when you decided to use the "Dulux" finish in your entire production?

A. Yes. We started to put it in production late in 1932, and, by 1933, we had converted over completely.

Q. Have you continued to use the "Dulux" finish on your refrigerators since that time?

A. Yes, we are using it today.

Q. Where do you get this finish that you use, from what supplier?

A. From the du Pont Company.

Q. You buy it all from the du Pont Company?

A. Yes.

Q. Do you ever obtain a finish of that kind or buy any quantity of a finish of that kind from other suppliers?

A. We haven't for our refrigerators or home freezers.

Q. Do you ever make test runs of the finishes supplied by other manufacturers?

A. Oh, yes. It is very definitely our policy to have more than one source of supply on all of the materials that we use. We have been testing and seeking an alternate supply almost from the very beginning, as soon as the other companies began to develop a similar product.

Q. Have you found another source of supply?

A. No, we have not, not as yet.

Q. Today the du Pont Company is your only source of supply for the high-baked white enamel?

A. That is right, for refrigerators.

Q. How many tests have you made of finishes made by other companies, if you know, roughly?

A. Well, I can't quote a number, but we have tested—

we are continually testing samples from other companies. I can recall a half dozen major suppliers that have submitted samples on which we have run tests.

Q. Can you name some of those suppliers?

A. Yes, Pittsburgh Plate Glass, Löwe Brothers, Ault and Wiborg, Sherwin-Williams, and Acme.

Q. Have you, in testing these other finishes, done so only in the laboratory, or have you tested them also in the field?

A. We have tested many of them in the field.

Q. Are those tests confined to a few refrigerators, or do you make a substantial run for your samples?

A. Our general procedure is that we always run a laboratory test first, and if the panel test, the test made under synthetic conditions, shows up well enough to warrant it, then we will make a run on the production line, which may be a matter of hundreds, or even thousands of refrigerators. We have made as many as ten thousand on trial models which we have placed in the field for observation. Our procedure is not to consider changing either the source of material or type of material without having about a three year field test.

[fol. 4808] Q. If it is your policy to have two sources of supply, why is it that you have continued to buy all of your high bake white enamel from the du Pont Company?

A. We haven't been successful as yet in getting a competitor of du Pont to supply a material which has the total balance of qualities that we demand in the finish that we use.

I might say, in our refrigerator work, the paint finish, the white finish on these refrigerators and home freezers is subjected to a very severe service.

First of all, they are subjected to kitchen greases. They are subjected to scratch, mar and abrasion. They are subject to color change. Due to the fact that the refrigerators run colder than the surrounding atmosphere, the relative humidity in the vicinity of the surface is high, so that corrosion is a very severe problem in refrigerator finishes.

One last thing is that the white finish is very easily stained by fruit juices and other things.

Our problem has always been to get a finish which had a good balance of all of these five or six qualities that I have mentioned. The competitive finishes that have been

submitted frequently would be very strong in one or two or three of these characteristics, maybe even better than the "Dulux" we are using, but would be weak in some one of the other factors.

The fact that du Pont, with its specialized knowledge of this refrigerator finish, has been able to keep such a perfect balance between these various characteristics has enabled it to maintain its position in our testing.

Q. Does General Electric itself make finishes?

A. Yes.

Q. Does General Electric make a high bake white enamel?

A. Yes.

[fol. 4809] Q. Have you tested that high bake white enamel for use on refrigerators?

A. Yes.

Q. Have you ever adopted it?

A. No. Our own people haven't produced a finish which has the specially balanced characteristics that makes it fitted for refrigerator use.

A finish that might be very wonderful for some other product may be unfit or not so desirable for use on refrigerators.

Q. I think a little while ago you stated that General Electric also used "Dulux" enamel and primer on its home freezers, is that right?

A. That is right.

Q. From what company do you get your requirements for these freezers?

A. We use the same material on the freezers as we do on the household refrigerators.

Q. Have you ever used the finishes made by any other company beside du Pont?

A. Not on a production basis.

Q. Have you tested other products for that purpose?

A. Oh, yes, we have.

Q. Why is it that you continued to use "Dulux" alone on your home freezers?

A. Well, for much the same reason as I outlined for the household refrigerators, for this balance of the qualities

that we require. The same problems by and large exist for home freezers as for household refrigerators.

Q. Mr. Knight, what other finishes are used on refrigerators besides these high bake white enamels and primers that you have been testifying about?

A. Well, we use, on some of the parts that aren't subjected to the humidity conditions, other materials. For example, on panels, the back panels and the parts of the refrigerator machine that run warm, where they are not subjected [fol. 4810] to these severe conditions, we use other materials.

Q. What kind of materials are those generally?

A. Well, we have used japan for some of the parts, and on some occasions we have used air-dried type materials where the conditions warrant it.

Q. From whom do you buy those materials?

A. We buy them from various companies. One of the suppliers which supplies us japan in quantity has been the Suydam Company. That is about the only one I can remember at the moment.

Q. Mr. Knight, does General Electric at the present time finish the exterior of any of its refrigerators with porcelain?

A. No.

Q. Have you ever used porcelain for the exterior of a refrigerator?

A. Yes. Before the war we made, oh, roughly, five per cent of our production for, perhaps, eight or ten years before the war with a porcelain finish.

Q. Why have you not used the porcelain finish on any of your refrigerators since the war?

A. Well, there are several reasons for that.

First of all, the "Dulux" materials today are considerably better than they were ten or fifteen years ago, so the margin of difference in the quality or the lasting qualities of porcelain and "Dulux" has narrowed down to the point where, in most applications, the customer doesn't get very much for his money when he buys a porcelain finish.

In addition to that, since the war, it has been difficult to get the enameling grade iron that we needed, and the market seems to be shrinking rather than increasing.

Q. You mean the market for porcelain refrigerators?

A. Yes.

[fol. 4811] Q. Is more or less labor required when you make the refrigerator with a porcelain material?

A. With the designs that we have had and the materials available, there has been substantially more labor cost and material cost in the porcelain exteriors.

Q. Mr. Knight, I want to turn briefly now to another subject.

Are you familiar generally with the refrigerants which were used in General Electric's household refrigerators from about 1932 to date?

A. Yes.

Q. What refrigerant does General Electric now use in its household refrigerators?

A. We use Freon 12.

Q. When did you first begin to use Freon 12, if you know?

A. We used it in limited quantities in household refrigerators before the war, starting, I would guess, about 1941 or 1942, thereabouts, in small quantities. After the war, we rather quickly switched 100 percent to Freon 12.

Q. What did you use before the war when you were not using F-12?

A. Mostly sulphur dioxide.

Q. Can you tell us why General Electric did not use F-12 at an earlier date for all of its household refrigerators?

A. Well, in the time when Freon-12 was introduced and was being fairly widely used in some of our commercial applications, which did not come under any part of the General Electric Company, we studied the use of F-12, and we didn't adopt it for the reasons it would require a complete redesign and retooling of our machine, and the cost of Freon at that time was, we considered, prohibitive.

We found no great advantage at that time from the customers' standpoint to use it.

Q. Have you ever heard of a refrigerant called F-114?

A. Oh, yes.

[fol. 4812] Q. To your knowledge was General Electric ever interested in using or purchasing F-114 for use in its household refrigerators?

A. No, I am reasonably sure that we never made any attempt to buy it.

Q. Can you say why you were indifferent to that refrigerant?

A. First of all, we favored the reciprocating type machine, and in the reciprocating type machine the F-114, which is a low pressure, high volume gas, is a disadvantage rather than an advantage. So that in order to use this material, we would have been required to have a completely different design, and all of our tests and studies indicated there would be no advantage from a cost or performance standpoint.

Q. Is the different type of design to which you refer the rotary compressed type design?

A. That is the design for which F-114 seems to be best adapted.

Q. To your knowledge, Mr. Knight, what refrigerator companies in this country have ever used a rotary compressor in their household refrigerators?

A. Frigidaire and Norge and Sunbeam—that is now Seeger. They are the only ones I personally know of.

Mr. Cox: You may examine.

Cross Examination.

By Mr. Harsha:

Q. Mr. Knight, referring to the period 1931-1932, during which I believe you testified that General Electric first began to test "Dulux," what finish had GE used prior to the introduction of "Dulux"?

A. Nitrocellulose lacquers.

Q. From whom did you purchase them?

A. Well, we bought some from du Pont, some from Ault [fol. 4813] and Wiborg, some from Mason Waldham. I believe we bought some from Pittsburgh Plate Glass.

Q. Prior to this time was GE producing a porcelain finished home refrigerator?

A. No. We bought some porcelain finished refrigerators from other companies, but we made none ourselves.

Q. Do you know what other refrigerator manufacturers at this time—I am speaking now of 1931 or 1932 and slightly thereafter—were using porcelain as their finish rather than a synthetic resin finish?

A. I don't believe—I don't know of any company that produced solely porcelain. I know that most of the companies had porcelain models in their lines. What proportion they were, I don't know, but I am very sure that none of them, or none of the major producers at that time, were exclusively porcelain.

Q. How about Frigidaire? What was that?

A. The ones that I am familiar with, they had both the porcelain and nitrocellulose finishes.

Q. Do you know which was the more popular line at that time in terms of finish? Whether they were making more of one—

A. I don't know percentage-wise, no. In our own case, the percentage of porcelain models was very small.

Q. How about Westinghouse? Were they making refrigerators at that time?

A. Yes.

Q. And what were they using?

A. Very largely nitrocellulose finish.

Q. Do you recall any other refrigerator manufacturers who were putting out a porcelain finish refrigerator?

A. I believe that Kelvinator had some porcelain models at [fol. 4814] that time. As a matter of fact, at that period of the production of refrigerators, the majority of the refrigerator cabinets were from ice box manufacturers, such as Siegler and Jewett, and there were a half dozen other makes.

The porcelain exteriors were largely simply steel panels that were fastened on with metal trim, so the problems of porcelain at that time were particularly severe.

Q. At this time, do you recall whether the Frigidaire Division of GM was advertising widely the fact that their refrigerator was a porcelain finish?

A. Oh, yes, they made quite a point of it.

Q. As a matter of fact, wasn't there somewhat of a division of opinion among various refrigerator manufacturers in this period, in the early '30's, over whether porcelain finish or a high bake enamel finish was best?

A. I do not recall any time in the history of the refrigerator business when there was not a difference of opinion about everything, but I believe it was largely a matter of sales propaganda or sales points.

Q. This division of opinion, if I can describe it in that loose fashion, continued over the years?

A. Well, the facts are no manufacturer that I know of today makes a high percentage of its product in porcelain.

Q. How about immediately prior to World War II?

A. The percentage at that time was quite small. As I said previously, around 5 per cent.

Q. Yes?

A. I have not a too clear idea of what Frigidaire's were, but they were the great proponents of porcelain finishes.

Q. Were they still advertising widely porcelain finish [fol. 4815] just before World War II?

A. I do not recall that they were.

Q. How about Kelvinator, were they wide advertisers?

A. I do not recall Kelvinator making much of an issue of the porcelain finish.

Q. Were they known in the trade as being largely porcelain finish manufacturers?

A. Not Kelvinator, no.

Q. What?

A. Kelvinator was not.

Q. How about Westinghouse?

A. No.

Q. Now, where was this "Dulux" used on the home refrigerators? You say General Electric adopted it along in 1932 or 1933.

A. In our Erie Works.

Q. I was not very clear, but I have reference now to the box itself, the refrigerator itself.

Was it used on the outside of the cabinet?

A. Yes, on the exterior.

Q. Now, I believe in one of your previous answers you indicated that today the percentage of porcelain finish used on home refrigerators has declined, is that right?

A. In our own case, we are making none at all. We felt that the reason for using porcelain is probably less today than it was fifteen years ago due to the fact that the quality of the high bake synthetics has so greatly increased over that period of time.

Q. Now, you said, I believe, prior to the war, and for some considerable period of time, that Frigidaire did widely ad-

vertise the fact that theirs was a porcelain finish refrigerator, is that right?

A. Yes, they were at the time making both kinds though, I am quite sure.

Q. But they were advertising the porcelain finish, weren't they?

A. Yes.

[fol. 4816] Q. Isn't it true that today Frigidaire is using largely "Dulux"?

A. Yes, sir.

Mr. Harsha: That is all, thank you.

Mr. Cox: That is all, Mr. Knight. Thank you very much.

(Witness excused.)

Mr. Cox: I will call Mr. O'Donnell.

JOHN D. O'DONNELL, called as a witness on behalf of the defendants, having been first duly sworn, was examined and testified as follow:

Mr. Cox: In the case of this witness, your Honor, there will be some documents introduced and a booklet has been supplied.

The Court: Do I have the book?

Mr. Cox: Yes, you have the book.

Direct Examination.

By Mr. Cox:

Q. You are John D. O'Donnell?

A. Yes.

Q. Where do you live, Mr. O'Donnell?

A. Dayton, Ohio.

Q. What is your occupation?

A. I am a salesman in the Industrial Finishes Division of the du Pont Company.

Q. Where is your office?

A. In Dayton, Ohio.

Q. Now, as salesman, do you have any dealings with the Frigidaire Division of General Motors?

A. Yes, I do.

[fol. 4817] Q. What do you sell to the Frigidaire Division of General Motors?

A. I sell primers, "Dulux" enamel, lacquers, general line of industrial products.

Q. How long have you been doing this work in Dayton, Mr. O'Donnell?

A. I came to Dayton late in 1925.

Q. Have you been there continuously since that time?

A. No, I had a break. I was there until 1930, and I came back a year or so later and took up the contact with Frigidaire again in 1943.

Q. When did you first sell finishes to Frigidaire?

A. In 1926.

Mr. Cox: Mr. Harsha, I should like with your permission to make a statement for the record at this time to this effect.

As I think you know, the refrigerator business of General Motors in the early or middle 20's was carried on by the Delco Light Company, and at some point, the date which I hope will be furnished in time by counsel for General Motors, the name was changed to Frigidaire, and with your permission, I propose throughout this examination to refer to Frigidaire throughout the entire period of time.

Mr. Harsha: That is satisfactory.

Mr. Cox: If that is satisfactory to counsel and the Court.

By Mr. Cox:

Q. There are documents in the record which refer to Delco Light as the company which made the refrigerators.

Now, I direct your attention to 1926, which is the time when you say you first sold finishes to Frigidaire. What [fol. 4818] did you sell them at that time?

A. The first material I sold to Frigidaire was black baking enamel. At that time, there were terms used such as rubber black, black finish enamel. That terminology is common to the materials now generally known as black baking enamel. They might be called rubber coated, or black finishing enamel.

Q. Where was this black baking enamel used?

A. It was used on their farm lighting units, ice cabinets, and the compressor of the refrigerator.

Q. Do you know what kind of top coat the Frigidaire was using on the exterior of its refrigerators in 1926?

A. The top coat material that was used was "Duco," or nitrocellulose lacquer.

Q. Did you sell them that material?

A. Yes, I did.

Q. Do you have any general recollection now as to what part of Frigidaire's refrigerator production was finished with "Duco" in 1926?

A. Yes, in 1926, practically all of their production was finished in "Duco."

Q. Did you sell Frigidaire all of "Duco" at that time?

A. Yes, at that time.

Q. Was there a primer used with the "Duco"?

A. Yes, there was a baking primer, and the "Duco" was covered with a lacquer top coat.

Q. Did you sell that primer to Frigidaire at that time?

A. Yes, I did.

Q. Now, did Frigidaire use any other kind of finish on any of its refrigerators at that time?

A. Yes, they used some porcelain.

Q. Was that on a large or small part of their production, if you remember, generally?

A. Well, early in the production, they used mostly [fol. 4819] "Duco" but going into 1927 and 1928, and along there, their porcelain production increased over "Duco" considerably.

Q. Now, I direct your attention again, if you will, to the year 1926.

Do you know where Frigidaire got the porcelain at that time?

A. They made their own.

Q. They made their own?

A. Yes.

Q. Do you recall, or do you know at that time, what their porcelain making facilities consisted of?

A. Yes, I remember quite well. They had two rather small box-type ovens. They were not conveyerized.

Q. Now, you said a moment ago, for some time, as I understood your testimony, Frigidaire continued to use "Duco," and, I take it, the primer on most of its production of refrigerators, is that right?

A. Not for very long.

Q. How long?

A. I would say for a period of up to 1927 or 1928; their production was increasing in porcelain so that the ratio of porcelain finished cabinets to "Duco" finished cabinets was quite high in favor of porcelain.

Q. During this period of time, in 1926 and 1927, to the extent they were using nitrocellulose lacquer for exterior finish, where were they getting it?

A. They were getting it from du Pont.

Q. Now, you referred to something that happened in 1927 and 1928 to porcelain.

What did happen? Did they begin to use more porcelain at that time?

A. Yes, they increased their facilities and upped their production proportionately.

Q. Were you told by anyone in Frigidaire before that date, that they were going to do it?

A. Yes.

[fol. 4820] Q. Were you told why they were going to do it?

A. Yes, we were.

Q. What did they say to you about it?

A. They told us that the "Duco" finished cabinet that they were servicing in the hot, humid, salt air climates in Florida and Texas was not holding up very well, and the porcelain cabinets they were servicing in these areas were showing superior quality over our "Duco" finish, and that is why they were going to porcelain.

Q. What steps, if any, did du Pont take after it received that information from Frigidaire?

A. They sent engineers to the southern climates to inspect the finish of "Duco" as against porcelain, and to report back to us their findings. They confirmed the Frigidaire opinion that the porcelain in those climates was a superior finish to "Duco" finish.

Q. Did you make any investigation about the use of porcelain in other parts, or the use of "Duco" in other parts of the country?

A. Yes, we very definitely did, and were very pleased to find that, in what we classified as the "normal climates" in

this country, the lacquer finished cabinets were proving very satisfactory.

Q. Roughly, in what part of the country was it that "Duco" for finish proved to be unsatisfactory?

A. In the years that we have been running these periodic climate tests, we considered Texas, New Orleans, Miami, Florida, as representing the most severe exposure conditions, and we used Baltimore and Washington as pretty representative of what we call "the other parts of the country."

Q. You used Washington as a representative?

A. Yes. It is surprising.

[fol. 4821] Q. I ask you, when was this specific investigation about which you testified, made, approximately, what year, if you could tell us?

A. Well, we made several.

Q. Well, I am directing your attention to the one you made after you got complaints from Frigidaire.

A. Prior to their increasing their percentage of porcelain?

Q. Yes.

A. 1927.

Q. Now, at that time, did "Duco" have any advantages compared to porcelain as a superior finish of refrigerators?

A. Yes, the "Duco" finish was less expensive to apply, didn't require the baking oven for the top coat—only needed to bake the primer.

The finish was easy to repair in case of a damage, a chip or a scratch, or any damage done to the finish. In the case of the "Duco" finish it was easy to touch up, whereas the porcelain finish could not be repaired. We have not learned yet how to do that. Those are the general differences.

Q. Was there any difference in the shipping problem, so far as porcelain refrigerators are concerned?

A. Yes, because porcelain required special enamel primer to withstand the high temperature of the high baking of porcelain, and the excess weight of the porcelain box, and the hazard of chipping the porcelain, the shipping crate had to be designed of better and stronger material, and it cost more money than the shipping crate that they used for shipping "Duco" boxes.

Q. Now, after you made this investigation in 1927, did you personally try to persuade the Frigidaire representatives not to increase their use of the porcelain?

A. Oh, yes, I did all I could in that respect.

Q. Did other representatives of du Pont in your presence, or to your knowledge, likewise try to persuade Frigidaire [fol. 4822] not to increase its use of porcelain?

A. Yes. I called for some help in this emergency and our director of chemistry of our finishes division, Mr. Callahan, and our general sales manager, Mr. Lackey, came to Dayton, where we had a conference with the Frigidaire officials including the vice president, Mr. Funkhauser, their chief chemist, Mr. Williams, their director of purchases, Mr. Barney, and Mr. Kettering sat in on that conference.

Q. Now, what did you say at that conference, if you remember?

A. We presented the proposition to Frigidaire that, as the "Duco" finished cabinets that had been in service in all parts of the country other than the salt air climates, and so on and so forth, had proven so satisfactory, we felt they should be willing to continue using "Duco" on the boxes that would be used in those climates, and only produce porcelain for the humid, salt area sections, Florida, et cetera.

They didn't go along with this too well, most of them. It so happened Mr. Kettering thought we had a good point. He mentioned that he had in his own use three—if I remember rightly—Frigidaire "Duco" finished cabinets that were quite satisfactory to him, and that he didn't see why they should be required to suffer the expense of porcelain in production and pay more for shipping crates and so forth, but the other Frigidaire people stood by their guns and insisted that they wanted to feature porcelain, and they proceed to increase their facilities and turn out more porcelain.

Q: In this conversation did you tell them about the investigation you had made in the field in the different areas in the country?

A. As a matter of fact, we had one of our men who had [fol. 4823] made the last survey, sit with us at this conference, and tell what we had experienced in the study.

Q. Now, I want you to consider this question very carefully and rake your memory, Mr. O'Donnell. Have you told us about all of the arguments you made to the Frigidaire representatives at that meeting that you can now recall? Is there any argument you made to them that you have not mentioned?

A. I cannot recall, but we put every force we could into our proposition. I think we have covered it quite thoroughly.

Q. Did you say anything to them about du Pont's owning stock in General Motors?

A. Oh, no, it never occurred to us.

Q. Did any one representative of General Motors or Frigidaire at that meeting, other than Mr. Kettering, agree with your position?

A. No, I don't think so.

Q. Now, what happened after that meeting? So far as Frigidaire's purchases of "Duco" from you are concerned?

A. Well, their "Duco" purchases increased because their production increased. Their ratio of production, finished in "Duco" as against porcelain, changed to a much higher percentage of porcelain than "Duco."

Q. Can you tell us approximately what percentage of their production thereafter was finished in porcelain as compared with "Duco"?

A. They went up to as high as 80 percent porcelain to 20 percent "Duco."

Q. Over what period of time did that increase take place?

A. Well, that was a gradual turnover on up into, if I recall, 1929, and the ratio was 80 to 20 or better in favor of porcelain.

[fol. 4824] Q. In between the time you attended this meeting that you described and 1930, when I think you said you temporarily left Dayton, did you ever again make any attempts to persuade Frigidaire to use "Duco" as against porcelain, as a superior finish?

A. We continued a campaign towards that end, and always have definitely striven to develop more interest in Frigidaire in "Duco" as against porcelain.

Q. When you left Dayton in 1930, Mr. O'Donnell, who replaced you as the salesman who dealt with Frigidaire?

A. Mr. R. M. Cook.

Q. Is Mr. Cook now alive?

A. No, he is dead.

Mr. Cox: At this point, may it please the Court, I should like to offer the document which has been marked du Pont Exhibit No. 337 for identification, in evidence.

(Said document, so offered and received in evidence, was marked du Pont Exhibit No. 337.)

Mr. Cox: Du Pont Exhibit No. 337 is a trade report made by Mr. Cook, dated April 13, 1931, and I should like to read the first three sentences that appear on the back of the report:

"Talked to E. J. Barney, Director of Materials and Supplies, regarding method of handling contacts between du Pont and Frigidaire, sales department, purchasing, engineering and laboratories.

"Mr. Barney said, he would see that sample of Black 2015 submitted some time ago, was tested on Ice Cream Cabinets.

[fol. 4825] "Mr. Barney said that at meeting three weeks ago attended by Mr. Pratt, Vice President, General Motors it was decided again to stick to porcelain for Frigidaire cabinets and that present plans do not call for use of lacquer."

By Mr. Cox:

Q. To your knowledge, Mr. O'Donnell, did Frigidaire ever go back to the use of lacquer generally as an exterior finish for its refrigerators?

A. No, it did not.

Q. Now, Mr. O'Donnell, I want to refer to an incident that occurred in 1926 which is covered by certain documents which have been introduced in evidence by the Government in this case. Those documents are Government's Trial Exhibits 338 and 339.

Mr. Cox: Will you hand Mr. O'Donnell those documents?

By Mr. Cox:

Q. Now, Mr. O'Donnell, were you selling to Frigidaire in 1926?

A. Yes.

Q. I am going to ask you to look at the first of these documents which is Government's Trial Exhibit No. 338, and I call your attention to the first sentence of that document which is a letter from Mr. Pratt to Mr. Elms, and the sentence reads:

"I have your letter of January 9th in regard to rubber and finishing varnish purchased by Delco-Light from Lowe Brothers."

What was this rubber and finishing varnish, if you know? [fol. 4826] A. That is the material that I referred to earlier as being now generally known as black baking enamel.

Q. Were there two products or one?

A. There were two products, the rubber varnish was the first coat material, being pigmented to produce some filling properties, and the finishing varnish, also black, was used as the top coat.

Q. And will you tell us again what these particular finishes were used for, if you know, by Frigidaire, at this time?

A. Yes, ice cream cabinets, compressors, receivers, machine compartments, and so forth.

Q. Now, did you ever sell any of these materials—that is to say, the rubber and finishing varnish—to Frigidaire?

A. Yes, I sold some substantial quantities. As a matter of fact, I believe the first order I took for Frigidaire was for these materials.

Q. How many orders did you get from Frigidaire for these materials?

A. One or two orders. There was, I think, a carload of each, or possibly one order covering a mixed carload. We were dealing in materials of—I think the first and only order was about 10,000 gallons—5,000 each.

Q. Did you say the only order? Did you get only one?

A. I believe only one for this material.

Q. That is, one order received about the time this correspondence marked Government Trial Exhibit No. 338 was received?

A. Yes, it was, early in 1926.

Q. Now, do you recall the circumstances under which you made that sale of these products at that time? Do you recall anything about it?

A. Well, we were called in by Delco-Light Company as it was at that time, and told that they had been using a competitor's material in their original plant, now known and [fol. 4827] then known as Plant 1. That was a hand-operating, hand dipping system. They were going to automatic dipping on a much larger scale, 5,000 gallon capacity dipping tanks, and the material that they had been using was found to be not satisfactory for the big operation. They had studied the paint industry, and this particular type of product black backing enamel, and had determined that we would be the logical supplier to call to for engineering materials to fit this big operation, and that is how we were able to enjoy our first business with Frigidaire.

Q. Do you know who the competitor was that had been supplying them with the material for hand dipping?

A. Yes, a local concern at Dayton, Lowe Brothers.

Q. Were you told at that time how they happened to come to du Pont, to you, for this material?

A. Simply that they had investigated manufacturers of this type of product and felt that we would be the logical supplier.

Q. Now, you testified a moment ago that you sold them or got one order from them, is that right?

A. Yes.

Q. Did you deliver that order to them?

A. Yes.

Q. Do you now recall whether there was any delay in connection with the delivery of that order?

A. Yes, whether we had actually manufactured the material or not I am not certain, but we were asked by them to at least delay shipment until they could determine whether their old supplier, who had asked for an opportunity to put their material into production, would be able to actually satisfy them. They told us if that should happen, they would take any quantity of material we would have made up for them, but that they did want us to give this other supplier an [fol. 4828] opportunity and to wait for their report, which

was shortly after that, and they told us that they wanted us to ship our order or orders and that they would continue with our material.

Q. Did you ship the order?

A. Yes, we filled the tanks with our materials, the dip tanks.

Q. Did you ever at any time while you were dealing with Frigidaire get another order for this material from Frigidaire?

A. The order, whether it was for a carload of each or a mixed car, is somewhat confused in my mind. I haven't been able to remember since 1926. But whatever quantity we shipped early that year was the only order we received from Frigidaire for this type of product.

Q. Did they continue to use this product?

A. Oh, yes, in large quantities.

Q. Do you know where they got the product that they used?

A. Yes. They bought their material from that time on from the Kay & Ess Company in Dayton, which is now the Moran Paint Company.

Q. Did you make any attempt thereafter to sell them these products?

A. Oh, yes. We brought our superintendent of the varnish plant in Chicago, who we thought was our best man on those products, down to the Frigidaire plant to work with us. We also had servicemen to try to satisfy their objections to our material, if any, but we were not able to get any more business.

Q. Do you know who it was who sold them this material on behalf of Kay & Ess?

A. Yes, their salesman, Mr. A. J. Turner.

Mr. Cox: At this time, I should like to offer a document [fol. 4829] which has been marked du Pont Exhibit No. 338, which is a trade report on a visit that Mr. O'Donnell made to the Delco-Light Company on May 18, 1926.

(Said document, so offered and received in evidence, was marked du Pont Exhibit No. 338.)

Mr. Cox: The offset is so bad that I hesitate to ask anyone to read it. I will read the relevant paragraph.

This is headed:

"Black Baking Enamel—For the present they have adopted Black Enamel made by Kay & Ess of Dayton for finishing 'Receivers.' Our first sample of Locomotive Black was not satisfactory, whereas Kay & Ess submitted a satisfactory enamel. They have not yet tried 9209 our latest sample. Will try this as soon as they can but as the Kay & Ess material is working O.K., they are not so anxious to change."

By Mr. Cox:

Q. Is that a report you wrote?

A. Yes, I remember that.

Q. Did they ever thereafter change to your material, to your knowledge?

A. No, they never did.

Q. Is this black baking enamel and Locomotive Black which is referred to in your trade report the same material that is described as rubber and finishing varnish in Government's Trial Exhibit No. 338?

A. The same.

Q. Mr. O'Donnell, do you recall the development of a synthetic enamel called "Dulux"?

A. Yes, I do.

[fol. 4830] Q. What, in general, is the difference between "Dulux" and "Duco," can you tell us?

A. Our first product, "Duco," was a nitrocellulose lacquer, an air-dried material, though it would be used over a baked primer.

"Dulux" is a synthetic resin material, which, like the primer, requires a high bake.

Q. Does "Dulux" have any advantages over "Duco" as a finish for refrigerators?

A. Very definitely. The hardness, flexibility, toughness, adhesion, stain-resistance, and a very important property, moisture-resistance, are all better than any properties of that sort that we were able to incorporate into our lacquer products. So much so that we were very enthused when we had the results of all test work and were satisfied that it was the finish that the refrigeration industry had long been looking for.

Q. Can you tell us whether "Dulux" is more or less expensive than "Duco" in application?

A. Well, in application, the cost of operating a bake oven for the top coat would be more than simply air drying the lacquer. But, because of the superior hiding quality and spreading rate, the number of square feet per gallon that can be obtained with "Dulux" over "Duco" is so much greater that the actual cost per square foot of "Dulux" as against "Duco" would be about half the cost of "Duco."

Q. What company first developed "Dulux"?

A. The du Pont Company.

Q. Was this finish, if you know, made available to all refrigerator companies at the same time?

A. No. We first made this material available to the General Electric Company.

Q. Was the General Electric Company at that time a competitor of Frigidaire?

A. Oh, yes. As a matter of fact they were, as they are now, their principal competitor.

Q. Do you know how long it was, after General Electric adopted "Dulux", before it was adopted by Frigidaire?

A. Approximately one year, possibly a little more than a year.

Q. Did Frigidaire immediately begin to use "Dulux" on all of its refrigerators, do you know?

A. Oh, no. They never used either "Duco" or "Dulux" on all of their production. They have always used some porcelain.

Q. Let me direct your attention to the late 1930's, and ask you whether you are in a position to estimate for us what proportion of Frigidaire's production at that time was finished with "Dulux" as against porcelain?

A. In the late 30's, the "Dulux" finish had proven so satisfactory that the ratio of "Dulux" to porcelain got as high as 80 per cent "Dulux" to 20 per cent porcelain.

Q. 80 per cent "Dulux" as against 20 per cent porcelain?

A. That is right.

Q. Was that change in proportion a gradual change on the part of Frigidaire, if you know, or did it occur all at once?

A. Oh, it was a gradual change.

Q. Now in recent years have you attempted to persuade Frigidaire to finish all of its refrigerators with "Dulux"?

A. Yes, we have repeatedly.

Q. What have you said to them in an attempt to persuade them to do so?

A. That our experience in serving the refrigerator industry throughout the entire country has satisfied us that the performance of the "Dulux" finish has been equal to the requirements of the industry; and that we would like to [fol. 4832] sell Frigidaire on the use of "Dulux" 100 per cent, but have never been able to do so.

Q. Have you told us all of the arguments that you have used in the attempt to persuade them to use "Dulux" instead of porcelain?

A. Well, we have submitted panel exhibits, and we have featured the difficulty of repairing porcelain when damaged, and evidence of that sort. That would be all.

Q. Have you ever in those conversations said anything to them about du Pont's ownership of stock in General Motors?

A. We have not.

Q. Mr. O'Donnell, to your knowledge, is there any other manufacturer of refrigerators today in the United States who finishes the exterior of its refrigerators with porcelain?

A. No, sir, there is none that we know of.

Q. What type of finish do the other refrigerator manufacturers use?

A. They all use "Dulux" or "Dulux"-type material.

Q. To your knowledge, was there ever a time that any of the other refrigerator companies, I mean other than Frigidaire, finished the exteriors with porcelain?

A. Exclusively?

Q. Or in part? Was there ever a time that any of the other companies used porcelain as an exterior finish?

A. There may have been. Some of the concerns, years ago, possibly in the late twenties, may have turned out a part of their production in porcelain, but there have not been any using porcelain, I am sure, since the advent of "Dulux".

Q. You are now speaking of porcelain as an exterior finish?

A. As an exterior finish.

[fol. 4833] Q. Do you know whether Frigidaire manufactures washing machines?

A. They do.

Q. Do you know when they first began to manufacture those automatic washing machines?

A. Yes, that was in 1946.

Q. What kind of finish does Frigidaire use on the cabinet of its automatic washing machines?

A. They use porcelain.

Q. Have you ever attempted to persuade them to use the "Dulux" on those cabinets instead of porcelain?

A. Yes, we have.

Q. What have you said to them about that?

A. We have drawn their attention to the fact that we have been selling "Dulux" to other manufacturers of washing machines with considerable success, and we would present evidence of the outstanding properties of "Dulux" for these particular requirements, such as acid resistance and the like, and the advantages of repairing the "Dulux" finished cabinet should it be damaged against the difficulty of repairing porcelain, but we were not able to sell them.

The Court: The Court will now recess for fifteen minutes.

(A recess was here taken.)

The Clerk: Case on trial.

By Mr. Cox:

Q. Mr. O'Donnell, I think when we adjourned, I was asking you about the use of porcelain in washing machines, and you had told us that you had made efforts to persuade [fol. 4834] Frigidaire to finish the exterior cabinets of the automatic washing machines with "Dulux."

Have you ever been successful in persuading them to adopt "Dulux" for that purpose?

A. We have not.

Q. To your knowledge, does any other manufacturer of washing machines in this country, other than Frigidaire, finish their cabinets with porcelain?

A. No, there are no others.

Q. What kind of finish do the others use?

A. They use "Dulux" or "Dulux"-type material.

Q. Mr. O'Donnell, so that the record may be clear, so far as Frigidaire uses "Dulux," where do they buy their "Dulux"?

A. They make their own.

Q. I am not talking about porcelain. I am talking about "Dulux."

A. Oh, "Dulux," they buy from us.

Q. "Dulux" is a trade name of du Pont synthetic enamel?

A. Yes, sir.

Q. Does du Pont supply that material today?

A. That is right.

Q. And that has been true for some years?

A. Yes, sir.

Q. How long roughly, would you say it has been true?

A. Since we established "Dulux." They adopted it about 1933; to this date.

Mr. Cox: I should now like to offer exhibits that relate to the production of Frigidaire, as it is divided between porcelain and "Dulux," the two exhibits being du Pont Exhibit No. 351 and du Pont Exhibit No. 352.

I now offer those documents.

(Said documents, so offered and received in evidence; [fol. 4835] were marked du Pont Exhibits Nos. 351 and 352.)

Mr. Cox: I call attention to the fact that du Pont Exhibit No. 351, which is a report made by Mr. Cook dated 1-23-42, shows that at that time the Frigidaire production was 1,500 cabinets per day, 7,500 per week, and 6,000 used "Dulux" and 1,500 porcelain.

Du Pont Exhibit No. 352 is a report which was made by Mr. O'Donnell, and contains a table showing the 1950 production. It is dated September 14, 1950, and shows the production for refrigerators, ice cream cabinets, home freezers, water heaters, electric ranges, and automatic washing machines.

It will be noted that of the more than one million refrigerators that have been made, roughly 938,000 were finished

with "Dulux," and 72,621 with porcelain; that all of the ice cream cabinets, home freezers, water heaters, were finished with "Dulux," and all of the electric ranges with porcelain, and all of the automatic washing machines with porcelain.

By Mr. Cox:

Q. Do you have a copy of that exhibit, No. 352, in front of you, Mr. O'Donnell?

A. Yes, sir.

Q. Can you tell us how many gallons of "Dulux" top coat and primer would be used in 1950 to finish 72,621 refrigerator cabinets, roughly?

A. 72,000 refrigerator cabinets would consume—

Q. 72,621 refrigerator cabinets.

A. It would consume about 36,000 gallons of "Dulux."

Q. Of just "Dulux," or "Dulux" primer?

[fol. 4836] A. That is the combination. We always refer to the system, including the primer and the enamel.

Q. Of that 36,000 gallons, more or less, is that evenly divided between the top coat and primer?

A. Equal parts were used, one coat of primer and one coat of "Dulux."

Q. Can you tell us what the price of the top coat and primer was per gallon in 1950?

A. The price per gallon of primer was approximately \$3.40 and "Dulux" close to \$4.00 a gallon.

Q. Now, you will note that that exhibit shows that in that year 113,545 automatic washing machines were finished by Frigidaire in porcelain.

Can you give us an estimate of how many gallons of "Dulux" and "Dulux" primer would have been required to finish that number of washing machines?

A. I would estimate close to 50,000 gallons.

Q. Are the prices you gave us a moment ago with respect to refrigerator finishes applicable to the finishes that have been used on washing machines?

A. Yes, sir.

Q. How about the primer and top coat in the case of washing machines, half and half?

A. In equal parts, yes.

Q. Now, to your knowledge, does Frigidaire produce any other household appliances on which they do not use porcelain?

A. Yes, they are now producing dryers.

Q. Clothes dryers?

A. Clothes dryers.

Q. When did they begin to make clothes dryers?

A. 1952.

Q. Prior to that time, did Frigidaire sell clothes dryers?

A. Yes.

Q. Now, where did it get the clothes dryer before it made them?

A. The clothes dryers were made by a concern in Illinois, [fol. 4837] the Hamilton Manufacturing Company at Two Rivers, Wisconsin. They were not made in Illinois; they were made in Wisconsin.

Q. Do you know what finish the Hamilton Company uses on the dryers they manufactured for Frigidaire?

A. Yes, they used our "Dulux" system.

Q. What finish did Frigidaire use when it began to manufacture dryers?

A. Porcelain.

Q. Have you tried to persuade Frigidaire to use "Dulux" instead of porcelain?

A. We definitely have.

Q. Do you know whether any other manufacturer of clothes dryers uses porcelain finish instead of "Dulux"?

A. So far as we know, there are none.

Q. What kind of finish do the other manufacturers use?

A. They all use "Dulux" or "Dulux"-type of material.

Q. Have you been successful at any time in persuading Frigidaire to use "Dulux" instead of porcelain on its dryers?

A. We have not.

Q. Do you know how many units of dryers that Frigidaire has produced in a recent year?

A. Last year, they did not have a full year's production, but they produced over 40,000 dryers.

Q. Can you give us an estimate in terms of dollar value as to the value of "Dulux," what it would have been if it had been used to finish those 40,000 dryers?

A. We would estimate approximately \$65,000.00.

Mr. Cox: Now, at this time, while Mr. O'Donnell is still on the stand, I should like to offer certain documents which have been heretofore marked for identification. These are not documents that were written by Mr. O'Donnell; they were written by Mr. Cook, who has been referred to in the [fol. 4838] testimony, but there are occasional terms in the documents which I think Mr. O'Donnell may assist us in defining.

The documents are du Pont Exhibits 339, 340, 341, 342, 343 and 344, and I now offer those documents.

I do not intend to read them at any length.

(Said documents, so offered and received in evidence, were marked du Pont Exhibits Nos. 339, 340, 341, 342, 343 and 344.)

Q. Mr. O'Donnell, there is a reference in one document, the one that has been marked du Pont Exhibit No. 340, to a primer and splatter finish. What is that? Will you tell us? Will you look at the document, du Pont Exhibit No. 340?

A. You asked—

Q. I asked you what a primer and splatter finish is.

A. Well, the primer would be a typical smooth primer; the splatter finish would be one that would give any irregular surface to the finished coat.

Q. Has du Pont ever sold that kind of a finish to Frigid-air?

A. No, we have not.

Q. I should now like to call your attention to the document which has been marked du Pont Exhibit No. 341, and ask you if you could tell us—I am going to ask you a question about the paragraph headed "Baking Clear 'Dulux' Alum. Vehicle."

Do you see that paragraph?

A. Yes.

Q. What do the letters and the numbers RC-3041 refer to, if you know?

A. That refers to a synthetic resin, clear vehicle, that would be used as a conveyor for, in this case, aluminum [fol. 4839] powder that would be added to the clear and sprayed on to produce an aluminum type of finish.

Q. Is that a du Pont code number?

A. Yes, the code number referred to is a du Pont code number.

Q. Now, turning to the next document I have just one question I want to ask you about that.

Can you identify A. D. Dick, who is referred to in that?

A. A. D. Dick at the time of this date was a correspondence clerk in our Chicago office.

Q. What were his duties?

A. He would receive orders as they came in in the mail, and place them on various plants, write letters to the customer acknowledging receipt of orders, referring to shipping when scheduled, and that sort of work.

Mr. Cox: This is just one of these documents which I should now like to read, which is the one that has been marked du Pont Exhibit No. 344, which is an excerpt from the Chicago office industrial weekly report for the week ending October 2, 1940. It is addressed to Mr. Biesecker.

By Mr. Cox:

Q. Who was Mr. Biesecker?

A. Mr. Biesecker at that time was regional manager of the finishes division here in our office at Chicago.

Q. This report was signed by L. C. Streeter. Who is Mr. Streeter?

A. Mr. Streeter was our industrial division sales manager for this region.

Q. Did he have any duties with respect to the sale of finishes to Frigidaire?

A. Yes, he was the superior to whatever salesman was calling on the Frigidaire at that time.

[fol. 4840] Mr. Cox: I should now like to read this excerpt:

"For the past two or three weeks Frigidaire have been making a production run with Lowe Brothers

Primer and Enamel. We have just learned that Frigidaire experienced serious trouble with the competitive primer and had to discontinue its use before the competitive run was completed. We have made a rush shipment of 'Dulux' primer to the customer which they will use under the Lowe Brothers enamel until all competitive enamel on hand has been used up. As soon as this is accomplished, Frigidaire will return to the use of 'Dulux' Primer and Enamel 100%. We do not as yet have any details of the trouble they experienced with the competitive primer."

By Mr. Cox:

Q. Mr. O'Donnell, do you know whether Frigidaire from time to time has tested competitive high bake whites?

A. They have run laboratory tests and prepared panels for exposure in Florida and other climates.

Q. Do you know whether they have ever run any production tests?

A. They have not run large scale production tests.

Mr. Cox: That is all.

You may examine.

Cross Examination.

By Mr. Houchins:

Q. Now, Mr. O'Donnell, focusing your attention back to 1927, when, as you told us, Frigidaire experienced some [fol. 4841] difficulties with its finishes on the refrigerators in the southern part of the country, do you know whether or not Frigidaire suffered substantial financial losses as the result of these failures on finishes in the South, in the salty regions?

A. I never heard of any losses, no.

Q. Do you know if, as a result of these defective finishes, which were showing up in these areas of salt water usage, Frigidaire decided to shift its entire production to porcelain, or did it shift only a percentage?

Q. Would you give us that percentage again, please?

A. In what year?

Q. 1927.

A. In about 1927, the percentage of porcelain as against "Duco" was comparatively small. Early in the year it grew. Toward the end of the year—I can't tell you by year, but I do know that within a couple of years porcelain had well overtaken "Duco."

Q. Do you know if Frigidaire replaced those finishes on refrigerators which went bad?

A. No, they did not.

Q. They did not?

A. I am sure they did not.

Q. As a result of that experience on the part of Frigidaire, was it your observation that certain executives or certain personnel in Frigidaire Company developed an antipathy toward "Dulux" as opposed to porcelain? Did they become porcelain minded?

A. They definitely became porcelain minded. But I draw your attention to the fact that in those years we did not have "Dulux"—1927 and 1928.

Q. Pardon me, I meant "Duco."

How long did this porcelain minded attitude on the part [fol. 4842] of Frigidaire executives and personnel continue?

A. Well, it continued through the years, and today they still like to feature that some of their production is porcelain.

Q. Did you find that an obstacle to overcome in selling Frigidaire people in later years on "Dulux"?

A. Yes, we did.

Q. Was that a substantial obstacle?

A. Yes, as indicated by the fact that their other appliances, washing machines, driers, and so forth, have always been porcelain since they have been making them.

Q. Do you know whether or not Frigidaire ever entered into extensive advertising campaigns concerning the virtues of porcelain over "Dulux"?

A. Yes, I know they have.

Q. Do you know whether or not Frigidaire had a very large plant facility for the application of porcelain?

A. They do have large plant facilities for that use.

Q. Do they still have such facilities?

A. Yes, sir, they definitely have.

Q. Do you have any idea how much money is invested in such facilities?

A. No, I wouldn't be able to estimate the value.

Q. I believe you told us, Mr. O'Donnell, that General Electric was the first refrigerator manufacturer that adopted "Dulux"?

A. That is right.

Q. Did you offer "Dulux" to Frigidaire before you offered it to General Electric?

A. No, we did not.

Q. Did you offer it to Frigidaire at about the same time as you offered it to General Electric?

A. I would say shortly after.

Q. What sort of reception did you get from the Frigidaire people?

A. They immediately agreed to conduct tests to determine to their own satisfaction that the material had the properties we claimed it had.

Q. After they conducted those tests, did they go into heavy "Dulux" production?

By the way, when was this?

A. They adopted "Dulux" for use in their plant sometime in 1933.

Q. When was it that you offered it to them for these tests?

A. About a year before. They had at least a year's time to test the material.

Q. When they adopted it, did they adopt it on a very large scale or on a small scale?

A. I was not contacting Frigidaire as the du Pont representative at that particular time. My recollection from talking to our representative in Dayton, Mr. Cook, was that, when they converted to the use of "Dulux" as a replacement for "Duco", that they did so on a large scale.

[fols. 4849-4851] Redirect Examination.

By. Mr. Cox:

Q. Mr. O'Donnell, I think there is one point in the record we had better try to clarify. Will you look at the report which is du Pont Exhibit No. 338, and also look at the first sentence of the letter which is Government's Trial Exhibit No. 338.

Now, in your trade report, you referred to black baking enamel, and locomotive black.

Does that refer to the same thing?

A. Yes, sir.

Q. And in Mr. Pratt's letter to Mr. Elms, there is a reference to rubber and varnish finish.

A. Yes, sir.

Q. Are rubber and varnish finish different products from black enamel or locomotive black?

A. No, they are the same.

Q. They are the same?

A. Yes.

Mr. Cox: That is all.

Mr. Houchins: That is all.

(Witness excused.)

[fol. 4852] WILLIAM E. KREUER, called as a witness on behalf of the defendant, E. I. du Pont de Nemours and Company, having been first duly sworn, was examined and testified as follows:

Direct Examination.

By Mr. Gribbon:

Q. State your name, please.

A. William E. Kreuer.

Q. And where do you reside?

A. I reside in Wellesley Hills, which is a suburb of Boston, Massachusetts.

Q. Are you employed by the du Pont Company?

A. I am.

Q. What is your present position with the du Pont Company?

A. I am regional sales manager of the Boston region.

Q. For which department of the du Pont Company?

A. For the Fabrics and Finishes Department of the Finishes Division.

Q. When were you first employed by the du Pont Company?

A. In 1922.

Q. Have you been continuously employed by du Pont since 1929?

A. I have.

[fol. 4853] Q. When did you assume your present position as Boston regional manager?

A. In the middle of 1950.

Q. Prior to that time what position did you hold in the du Pont Company?

A. I was industrial sales manager in Chicago, prior to going to Boston, and prior to that I was industrial sales manager in Cleveland, Ohio, starting in 1946, to 1950.

Q. And prior to 1946 you have been employed in the sales and finishes for du Pont?

A. I have.

Q. Now, directing your attention particularly, Mr. Kreuer, to the period from 1946 to 1950 when you served as industrial sales manager for the Cleveland region, will you tell us what your duties were during that period?

A. Yes, the duties of industrial sales manager in the Finishes Division is to supervise the sale of finishes to industrial manufacturers for the product that they manufacture, and to supervise the sales organizations; you help them merchandise the products that du Pont sells for that type of industrial product.

Q. Now, in that capacity you have nothing to do with trade sales or automotive sales?

A. That's right.

Q. Can you tell us whether there are located within the Cleveland territory, manufacturers who make refrigerators?

A. Yes, there are.

The Westinghouse Electric, Crosley Corporation, Frigidaire and Kelvinator.

Q. Did du Pont sell finishes to these manufacturers that you named?

A. We sold finishes to Westinghouse, Crosley and Frigidaire.

Q. What type of finish were you selling to these manufacturers?

A. We sold them "Dulux" primer and enamel at that time that you were speaking of.

[fol. 4854] Q. Now, that "Dulux" is a synthetic resin product?

A. It is, sir.

Q. And what were these manufacturers using that product for?

A. They were using it for the exterior of refrigerators and home freezers.

Q. Do you know what kind of finish these refrigerator manufacturers were putting on the interior of refrigerators when you came to Cleveland in January, 1946?

A. Yes they were all using porcelain.

Mr. Gribbon: I wish to introduce in evidence an exhibit marked DP No. 348. I believe your Honor will find that in the book that Mr. Cox put up on your desk yesterday afternoon.

This is a memorandum dated April 1, 1940, from R. M. Cook to L. C. Streeter, both of whom were identified yesterday as members of the du Pont sales organization.

It is headed at the top "Frigidaire Dulux for Inner liners".

(Said document, so offered and received in evidence, was marked du Pont Exhibit No. 348.)

By Mr. Gribbon:

Q. Mr. Kreuer, will you tell us what inner liners are?

A. Well, an inner liner is a synonym of the term "food compartment", and they both mean the interior of a refrigerator where you would put food that comes under refrigeration, and it doesn't include the interior of the door.

Q. But it does include the balance of the interior?

A. That comes under refrigeration.

Q. What is the word most commonly used to describe [fol. 4855] the balance of the interior of the refrigerator?

A. Well, I think that "inner liner" and "food compartment" are pretty generally used.

Mr. Gribbon: This is dated April 1, 1940, and reads as follows:

"E. J. Barney telephoned me at Philadelphia last Thursday morning that he had discussed this question"——

that is "Dulux" for inner liners—

"—with E. B. Newill, Assistant GM"—

By Mr. Gribbon:

Q. Are Messrs. Barney and Newill Frigidaire officials?

A. Well, this is prior to my time in Cleveland, and although I heard they are, I am not in a position to testify to that.

Mr. Gribbon: (Continuing):

"... and that Mr. Newill's opinion was, so far as Frigidaire's policy was concerned, that they would be very much opposed to the use of 'Dulux' for this purpose, that they would fight it with every facility at their command including advertising to show the advantage of porcelain over 'Dulux', and also that they would take this question up with N. E. M. A."

Q. In 1946 were other manufacturers besides Frigidaire using porcelain for the food compartments of refrigerators?

A. Yes, sir.

Q. Do you know, Mr. Kreuer, whether efforts had been [fol. 4856] made to promote the use of "Dulux" on food compartments prior to 1946?

A. Yes, I know that, although I didn't participate in that promotion.

Q. Now, during the period that you were at the head of the Cleveland office beginning in 1946 did du Pont renew its efforts to persuade refrigerator manufacturers to use "Dulux"?

A. Yes.

Q. Did you personally participate in those efforts?

A. Yes, I did, very vigorously.

Q. Do you recall the circumstances or the occasion for the renewal of your efforts to promote the use of "Dulux" on food compartments?

A. Yes, quite well.

The laboratory developed a new product called abrasion-resistant "Dulux" that, in the tests in the laboratory and field tests, looked outstanding for the purpose required in the food compartment because of its resistance to food acids and its abrasion resistance.

Q. Do you recall when that abrasion-resistant "Dulux" product was developed in the laboratories?

A. Well, it is pretty difficult to say when it was actually developed, because those things are steps, but I think it was first announced in 1944.

Q. And when was it made available in commercial quantities?

A. In 1946 or 1947.

Mr. Gribbon: I offer in evidence an exhibit that has been previously identified as DP No. 349.

(Said document, so offered and received in evidence, was marked du Pont Exhibit No. 349.)

[fol. 4857] Mr. Gribbon: Will you show Mr. Kreuer a copy of that exhibit?

This is entitled: "Summary of a Meeting of Refrigerator, Washing Machine and Steel Kitchen Cabinet Manufacturers Held in Chicago in November, 1944 by the Industrial Finishes Division".

By Mr. Gribbon:

Q. Did you attend the meeting referred to in this exhibit, Mr. Kreuer?

A. Yes, I did.

Q. Will you tell us something about this meeting, its purpose, and who attended?

A. Well, this meeting was one of a number of the same type that were conducted by the du Pont Company for our refrigerator customers.

Now, at that particular meeting, we invited our washing machine customers and our steel kitchen cabinet customers. The purpose of the meeting was to discuss the finishes we were selling, and new methods of application that had come up, and new finishes that had been developed.

Mr. Gribbon: I should like to read, with the Court's permission, portions of Exhibit DP No. 349, beginning with the first paragraph:

"Dr. Gowing's paper stated a strong case for the use of 'Dulux' on food compartments of domestic mechanical refrigerators. The standard two-coat 'Dulux'

systems were recommended with the mar resistant system receiving a preferential rating."

By Mr. Gribbon:

Q. Is that the abrasion-resistant product you refer to?

A. That's right.

[fol. 4858] Mr. Gribbon: Skipping down to the second paragraph:

"All customers who expressed an opinion were in agreement that 'Dulux' could be used satisfactorily on the food compartments of domestic refrigerators."

And down to the next paragraph:

"In spite of this overwhelming backlog of favorable data, no one manufacturer is willing to replace porcelain with 'Dulux' because of the selling tactics which have been employed by their competitors, and which would be repeated in all probability. 'Dulux' will not be used extensively for this purpose until the majority of the leaders in the field agree upon its adoption. It is not likely that Frigidaire and Kelvinator can be persuaded to quit porcelain, but there is some hope that Westinghouse, General Electric, Crosley, Gibson, and Norge will agree on the use of 'Dulux.' A calculated saving of 50¢ to \$2.50 per cabinet, depending upon porcelain costs in various plants, will accrue with the use of 'Dulux'. Mr. Van Derau stated that the savings would be even higher"——

Q. Who was Mr. Van Derau?

A. Mr. Van Derau is Works Manager of the Westinghouse Electric Company.

Q. Mr. Kreuer, did you devote a substantial portion of your time between 1946 and 1950 to the promotion of the use of this "Dulux" product for food compartments of refrigerators?

A. Yes, I devoted considerable time to it.

Q. Would you tell us briefly the qualities and properties of this abrasion-resistant "Dulux" that you urged as the basis for a switch from porcelain to "Dulux" for food

[fol. 4859] compartments?

A. Well, the properties can be best broken down into two parts.

First, cost, and under cost, I think it best to tell you that a food compartment consists of a top, a bottom, two sides and a back.

Now, all of those pieces which are welded together are finished with non-acid resisting porcelain, and then the bottom only is finished with acid resisting porcelain.

The reason for that is that the acid resisting porcelain costs so much more that they only put it on the bottom where it is more needed.

Now they have to apply approximately ten mils of porcelain versus two mils of "Dulux."

Another factor is that to use porcelain, you have to use what they call an enameling steel, which is a heavier gauge steel, and costs more than the lighter gauge steel which they can use in "Dulux".

The reason for the heavier gauge steel is the fact that porcelain at that time was baked at 1500 degrees Fahrenheit as compared to 285-degrees Fahrenheit for "Dulux." Each one of those things is more costly than "Dulux."

Another factor in the cost is that with this heat of 1500 degrees, you get a distortion of the metal, and when those food compartments are put into the refrigerator, they are sometimes twisted and turned, and the porcelain may chip.

When it does chip, the inner liner or food compartment must be discarded because there is no way of patching it.

With "Dulux" the food compartment, in the first place, doesn't distort because of the lower temperature, but if it [fol. 4860] is distorted and has to be manipulated into the refrigerator, it is much more flexible than porcelain and doesn't chip as readily. But if it does chip, it can be repaired.

Q. Will you tell us in some detail the efforts that you made to sell the refrigeration industry upon the use of "Dulux" for food compartments in this period, 1946 to 1950?

A. Yes. At that time we recognized a market for "Dulux" finish where porcelain was then being used, and we had an outstanding product.

So I personally developed a very elaborate merchandising

story that contained a lot of exhibits. In fact, it took about half a medium van to carry these exhibits around.

These exhibits were part of the prop in telling the merchandising story of our new abrasion-resistant "Dulux." This story was told all or in part to Crosley, Westinghouse, Kelvinator, General Electric, and Frigidaire.

Q. Were there any other companies that you know of?

A. I addressed a meeting, a combination meeting of Coolerator and Gibson sales people, in Chicago here with this exhibit and story.

Q. During what time did this demonstration take place?

A. I would say in 1947 to 1950.

Q. Were you able to persuade any of the companies to which you made your demonstration to adopt "Dulux" for use on food compartments?

A. There were three companies that adopted "Dulux" for food compartments—the Gibson Company, Franklin Transformer, and Coolerator. As I remember, they were the three.

Q. Did you make any attempt to persuade Frigidaire to [fol. 4861] use "Dulux" on food compartments?

A. Very great attempts.

Q. Did you ever visit the Frigidaire plant in an effort to persuade them as to the advantages of "Dulux" for food compartments?

A. I did on many occasions. In fact, I went to Frigidaire so many times with the "Dulux" story for food compartments versus porcelain that they began to know me as "Mr. Dulux for food compartments" and every time I went in they said, "Here he comes again to tell the story of 'Dulux' for food compartments."

Q. What arguments did you use in your effort to persuade Frigidaire to use "Dulux" for food compartments?

A. I used the argument that I have just outlined before, the cost angles and quality of the abrasion-resistant "Dulux."

Q. Did you ask Frigidaire to take into consideration the fact that duPont owned stock in General Motors?

A. Absolutely not.

Q. Were you able to persuade Frigidaire to test "Dulux" for food compartments?

A. Yes. Frigidaire did test "Dulux" on some cabinets for food compartments.

Mr. Gribbon: I offer in evidence an exhibit that has been identified as du Pont 345, which is a letter from Mr. Kreter to Messrs. Bullett and Merkle the next name should be rather than Nerkle.

(Said document, so offered and received in evidence, was marked du Pont Exhibit No. 345.)

By Mr. Gribbon:

Q. Who were these gentlemen to whom this letter was addressed?

A. Mr. Bullett was the director of the Philadelphia Laboratory, [fol. 4862] and Mr. Merkle was supervisor of sales service at the Philadelphia Laboratory.

Mr. Gribbon: I would like to read the second paragraph of this letter. It is dated March 17, 1947:

"As you probably know, this office has been doing considerable promotion work on DULUX for food compartments with Frigidaire, Westinghouse and Crosley. Westinghouse and Crosley are very interested in the use of DULUX on food compartments and will make the switch if Frigidaire will. Last week we had a meeting with Mr. Schweller of Frigidaire, who is interested in starting laboratory tests on DULUX finishes for food compartments. If the tests look satisfactory, he has agreed to finish 200 food compartments in DULUX."

By Mr. Gribbon:

Q. Did Frigidaire make the test referred to in this letter?

A. Yes. They didn't finish 200, but they finished a smaller amount.

Q. Were you able to persuade Frigidaire to use "Dulux" on their food compartments?

A. No.

Q. Did they continue to use porcelain?

A. They did.

Q. If you know, or if they gave you any reasons, what reasons did the Frigidaire representatives give you for their decision to continue to use porcelain rather than the "Dulux" you were offering?

A. Well, the Frigidaire people are very porcelain-conscious people, and they felt to advertise porcelain gave them a prestige in the industry.

There was another thing. They didn't altogether agree with the savings that we felt could be accrued by using "Dulux" versus porcelain.

[fol. 4863] Although "Dulux" was very resistant to food acid, much more resistant than porcelain, it did stain, but the stain would bleach out. That was another thing that they didn't see eye to eye with us on.

Q. The result was they continued to use porcelain on the food compartments?

A. That is right.

Q. Did you present the same arguments to other large manufacturers that you presented to Frigidaire regarding the use of "Dulux" for food compartments?

A. Yes, the same arguments.

Q. In particular, do you remember any large manufacturers that you approached?

A. Yes, the people I mentioned before, and that was especially Crosley and Westinghouse. I also took part of the story to General Electric and to Kelvinator.

Q. Referring to Crosley and Westinghouse, what view did the representatives of those companies express as to the merits of "Dulux" against porcelain for food compartments?

A. They thought it was an entirely satisfactory finish. In fact, they said that if Frigidaire or General Electric would go to "Dulux" for food compartments that they would go along.

Q. What factor of your arguments appeared to influence their judgment?

A. Well, I think the cost factor was the major factor.

Q. Did Crosley and Westinghouse make laboratory tests of "Dulux" for food compartments?

A. Oh, yes. Both of them made laboratory tests and some field tests were made too with refrigerators.

Q. Were you informed as to the results of both the [fol. 4864] laboratory and field tests?

A. Yes. In fact, they put a good number of them out in the field and they were inspected and found to be entirely satisfactory. We never had complaints on them.

Q. Nonetheless, you were unable to sell Crosley and Westinghouse "Dulux" for refrigerators?

A. No.

Q. Did they explain why they would not go along unless either Frigidaire or GE began to use "Dulux" on the interior?

A. Yes. They felt that they would be unable to combat the advertising of those two major companies who would advertise "Dulux." Undoubtedly their salesmen would refer to the "Dulux"—who would advertise—porcelain, pardon me, and the other two companies would have a "Dulux" liner, and the major companies would refer to them as painted liner, which would be a stigma attached to the word paint.

Q. Did you ever succeed, while you were in Cleveland, in selling Crosley or Westinghouse "Dulux"?

A. No, sir.

Q. During that time, did you continue your efforts to sell Frigidaire "Dulux" for food compartments?

A. Yes, absolutely, because they were the crux of the whole thing. If we could have sold Frigidaire on "Dulux" for food compartments, we knew there were a number of other companies that would go along, and it was a big sales plum that we were never able to gain.

Mr. Gribbon: I offer in evidence an exhibit which has been identified as DP No. 346 which is an excerpt from a report of a visit of John O'Donnell to the Frigidaire on August 1, 1950.

With the Court's permission, I would like to read a portion of the paragraph which is labeled 1-B.

[fol. 4865] "Mr. Sanger presented the 'Dulux' food compartment story to all men listed opposite with the exception of S. N. Schweller who unfortunately was not able to be with us being tied up in preparation for the visit of the president of General Motors Corporation tomorrow. We all agree this story was presented to a sufficient number of key people of Frigidaire who accepted our presentation as a well organized story. However, as we have always known Frigidaire to be the most porcelain conscious refrigerator manufacturer, they told us very definitely that this presenta-

tion would have no effect on their plans to continue making all interiors of porcelain as well as all inner door pans, as soon as feasible."

Did you participate in that demonstration, Mr. Kreuer?

A. I did not. I had left Cleveland before that.

Q. Do you know whether the material was the same used by you in your demonstrations?

A. Yes, this was material that I had prepared and talked about before.

Q. Do you know whether du Pont was successful in selling "Dulux" to Frigidaire for food compartments as the result of this demonstration?

A. I know they were not.

Q. Do you know whether du Pont has ever been successful in selling "Dulux" for this purpose for Frigidaires?

A. They have not.

Q. During the period 1947 to 1950, when you were promoting the use of "Dulux" for food compartments, do you know whether any of your competitors were attempting to promote the use of a similar product?

[fol. 4866] A. To my knowledge, there were no paint manufacturers, competitors of du Pont, marketing or testing such a product in the field.

Q. Do you know whether any competitor of du Pont has an available product comparable to abrasion-resistant "Dulux" that you attempted to sell for food compartments?

A. To my knowledge, at the present time, they do not.

Q. Mr. Kreuer, an exhibit which has been marked in evidence as DP Exhibit No. 352 shows in 1950 the production of refrigerators was 1,011,358. How much paint would have been required to finish the food compartments for that volume production?

A. Do you mean in dollars?

Q. Will you give us first in gallons, then in dollars.

A. Well, it takes about one-sixth of a gallon of "Dulux," that is the primer and enamel combined, for a food compartment. This was in 1950, and it is pretty hard to hit on an average price for 1950 because at that time prices were on the rise, but I would say that a price for the combined primer and enamel would be somewhere in the neighborhood of \$3.60.

So, one-sixth of that would be 60 cents, and for a million would be about \$600,000.

Q. \$600,000 worth of "Dulux" to finish the Frigidaire production?

A. Yes, sir.

Q. Using the same basis, can you tell us how much "Dulux" would have been required at that time by all of du Pont's "Dulux" customers to finish their food compartments with "Dulux" in 1950?

A. You mean including Frigidaire?

Q. Yes, including Frigidaire.

A. Well, using the same formula and knowing approximately the production of the Frigidaires, I would say it [fol. 4867] would be close to two and a half million dollars annually.

Q. If you know, Mr. Kreuer, to what extent has du Pont been successful in general, in promoting the use of this abrasion-resistant "Dulux" product?

A. Well, in addition to the three manufacturers of refrigerators that I mentioned before that used "Dulux" on their food compartments, the abrasion-resistant "Dulux" was also used on shelves in refrigerators by some manufacturers. It has been, and is still being used on metal office desks and metal office partitions.

Q. Did Frigidaire use it for shelving?

A. I cannot answer that question. I am not sure.

Q. Is that a major item in Frigidaire's requirements of "Dulux"?

A. Well, it would not be a major comparison with their over-all purchases, but it still would be a nice business.

Q. You don't know whether they use it?

A. No, I don't know.

Mr. Gribbon: You may cross examine.

Cross Examination.

By Mr. Hoyt:

Q. Mr. Kreuer, you mentioned the term, or used the word, that Frigidaire was porcelain conscious.

A. Yes, sir.

Q. Do you know the reason for that, for their having become porcelain conscious?

A. You mean the background reason?

Q. Well, I was wondering specifically if you knew anything about their facilities in the manufacture of porcelain.

A. Well, I know they have large facilities. I have never seen them.

[fol. 4868] Q. They produce their own, is that correct?

A. Yes.

Q. Do you know anything about the porcelain enamel equipment? Is that a separate piece of equipment from the porcelain making equipment?

A. Oh, sure.

Q. Do you know whether they have a substantial investment in porcelain enameling equipment?

A. I don't know anything about that. I would presume they would have, knowing the number of pieces that come out.

Q. Now, you testified in 1944, your abrasion-resistant—is that the term you used?

A. That is correct.

Q. That your abrasion-resistant "Dulux" was not ready for commercial sales, is that correct?

A. That is right.

Q. So this was an exploratory sort of meeting?

A. Well, it was a new product that was offered at this meeting. I would not call it an exploratory meeting.

Q. Had these various companies that you mentioned as being at that meeting conducted any tests of "Dulux" of this abrasion-resistant "Dulux", I mean?

A. To my knowledge, this was the first that it was announced. I am not positive whether they conducted tests prior to that.

Q. Specifically, did Gibson and Crosley?

A. I do not think that tests were conducted prior to that time. I think it was the announcement of it.

Q. So that the enthusiasm which you testified about that these companies had had not been based on previous tests?

A. Oh, yes.

Q. Tests by them

A. Oh, yes, they had tested du Pont "Dulux" prior to that, not the abrasion-resistant "Dulux."

Q. Not the abrasion "Dulux"?

A. No.

[fol. 4869] Q. Did you make an attempt to sell abrasion-resistant "Dulux" to Kelvinator?

A. Yes.

Q. What was their response?

A. Kelvinator purchased some abrasion-resistant "Dulux" in the west, which they sent down to, I believe, the Mexican plant of theirs to use on food compartments there, and then it became an export proposition and I was no longer in it.

Q. Did they ever purchase any "Dulux" for domestic use?

A. No.

Q. The first companies, I take it, who used this product were Gibson, Franklin and Coolerator?

A. That is correct.

Q. Were they major producers?

A. Well, —

Q. As compared to Kelvinator, Frigidaire, Westinghouse and Crosley?

A. No. I would say that all of them are smaller than the people which you mentioned.

Q. What was the first major company who adopted this abrasion-resistant "Dulux"?

A. I do not like to say these people are not major, but they were the three that adopted "Dulux."

Q. They were the only three, is that correct?

A. Yes.

Q. Wasn't there some conversation at this meeting, going back to the Bismarck Hotel meeting, wasn't there some controversy there between these companies or the different representatives as to the value of the abrasion-resistant "Dulux?"

A. Well, I think that is absolutely true; you always have a controversy on any subject that is brought up, cold like that.

Q. Have you finished?

A. I say you always have a controversy, and there was [fol. 4870] a dissenter. One of our men said that he did not feel that the value was there.

Q. Now, you stated that there were no other producers

of abrasion-resistant "Dulux", is that correct? I mean du Pont had no competitors in the field?

A. No one makes "Dulux" but du Pont, but there were no other manufacturers making anything comparable to the du Pont abrasion-resistant "Dulux".

Q. Does that statement also apply to the "Dulux" rather than the abrasion-resistant?

A. Oh, no, there were many other manufacturers of high baked products that were competing with "Dulux".

Q. Do they sell to refrigerator companies?

A. Yes, sir.

Mr. Hoyt: That is all.

Redirect Examination.

By Mr. Gribbon:

Q. Will you look, Mr. Kreuer, at the exhibit which refers to the meeting in the Bismarck Hotel regarding finishes in 1944. It is the same exhibit you were shown on cross examination.

Reference was there made to the attitude of the Seeger representative. Do you recall what position Westinghouse's representative took with respect to the cost savings of "Dulux" for food compartments?

A. Yes, Mr. VanDerau did not agree with Mr. Sosey. Mr. VanDerau has had lots of experience in finishing food compartments, because under his jurisdiction, there were ten thousand food compartments finished sometime prior to this meeting.

Q. Do you know whether Seeger had ever conducted [fol. 4871] tests prior to that meeting?

A. I do not think they had conducted tests prior to the meeting.

Mr. Gribbon: That is all.

Mr. Hoyt: That is all.

(Witness excused.)

Mr. Cox: Your Honor will recall that yesterday afternoon we explained that this general line of testimony was intended to deal with du Pont's sale of products to the

three divisions that were not covered by the testimony of Mr. Williams, the three divisions of General Motors being Frigidaire, Electro-Motive, and Packard Electric.

The testimony that we have offered so far in this line of proof relates to sales to Frigidaire.

It will now be necessary for us to interrupt this testimony about Frigidaire and present a witness who will testify about sales to the other two divisions, Packard Electric and Electro-Motive.

I will call Mr. William P. Fisher.

WILLIAM P. FISHER, called as a witness on behalf of the defendants, having been first duly sworn, testified as follows:

Direct Examination.

By Mr. Cox:

Q. You are William P. Fisher?

A. That is right.

Q. Where do you live, Mr. Fisher?

A. Chadds Ford, Pennsylvania.

Q. Where do you work?

A. Wilmington, Delaware, for the du Pont Company.
[fol. 4872] Q. What is your position with du Pont?

A. Manager of Industries Finishes Division, Fabrics and Finishes Department.

Q. When were you first employed by the du Pont Company?

A. January, 1926..

Q. In what department or division of the du Pont Company?

A. In the Finishes Division.

Q. Where did you first work?

A. At Parlin, New Jersey.

Q. How long did you work there? ○

A. I was at Parlin from 1926 to 1929, engaged in sort of liaison work between field and laboratory.

Q. What did you do in 1929?

A. In 1929 I was assigned to an industrial territory in northeastern Ohio.

Q. How long did you remain in northeastern Ohio?

A. I stayed there from 1929 until 1936.

Q. Where were your headquarters when you were in Ohio?

A. Oh, several towns—Cleveland, Warren, Youngstown.

Q. You say you remained there until 1936?

A. Until 1936.

Q. Was there a change in your duties at that time?

A. In 1936 I was sent to the Chicago office where I was a supervisor, field supervisor over an area including my previous territory.

Q. Field supervisor of what?

A. Industrial sales.

Q. How long did you remain in that position?

A. I stayed there until 1944 when I went to Boston for one year, and then returned to Chicago as Regional Industrial Sales Manager.

[fol. 4873] Q. How long did you remain in Chicago in that position?

A. Until 1950, when I went to Wilmington as assistant manager of industrial sales and then became manager in 1951.

Q. Now, in describing your work, Mr. Fisher, you have frequently used the term "industrial sales." Will you tell us what that term means in the du Pont Company so far as your duties were concerned?

A. Industrial Sales in the Finishes Division refers essentially to what is briefly known as paint-on products. That means paint that is applied to a product of manufacture as distinguished from paint that is sold for application to houses, or for distribution to retail or jobber channels.

Q. Does it include paint or finishes that are put on automobiles when they are first manufactured?

A. No, it does not.

Q. How is that branch described in the du Pont Company?

A. That is called automotive sales.

Q. And now to what extent while in your present position do you have responsibility for sales to any of the divisions of General Motors?

A. I have responsibility for what might be called auxiliary divisions, that is, Frigidaire, Packard Electric, and the Electro-Motive Division.

Q. Mr. Fisher, I want to direct your attention specifically to two of those divisions which have not been covered by the testimony so far, that is, Packard Electric and Electro-Motive.

I first direct your attention to the Electro-Motive Division of General Motors. Do you know what business is carried on by that division of General Motors?

A. They build diesel locomotives.

[fol. 4874] Q. Do you know what finishes are used by that division in the construction of diesel locomotives?

A. Yes.

Q. What finishes does the division use?

A. They use finishes on the exterior of the diesel which are our "Duco", colored various colors.

In the interior they use a synthetic finish, and then they use large quantities of what might be termed insulation finishes, insulation varnishes.

Q. Do you sell any finishes at the present time to Electro-Motive?

A. Yes.

Q. What kind of finishes does du Pont sell to Electro-Motive at the present time?

A. We sell finishes that go on the exterior.

Q. Is that a lacquer finish?

A. That is "Duco."

Q. Do you know or can you estimate how much of Electro-Motive's requirements of that lacquer for the exterior of the engine du Pont sells to Electro-Motive?

A. We sell them about 70 or 75 per cent.

Q. Do they buy that lacquer from any other competitor or any other company beside du Pont?

A. Yes. They buy the other 30 per cent or 25 per cent from a competitor.

Q. What competitor is that now?

A. Rinshed-Mason has most of it.

Q. Do you know whether the diesel locomotives that Electro-Motive builds are built to order or are they built in gross and just sold that way, if you know?

A. They are built to order. The sale of a diesel takes quite a while.

Q. Do you know whether the persons who order the engines ever specify the products that are to be used on [fol. 4875] the engine?

A. I think that in most cases they do. They may not specify always the product, but they will put a color number on there, and it happens in most cases that color number is our color number.

Q. Do you know why that should be, Mr. Fisher?

A. Yes. We over the years have been very active in the solicitation of railway business. We advertise the fact that we sell 85 per cent of the Class I railroads all or part of their passenger car requirements.

Q. Is it the railroads who order the engines from the Electro-Motive Division?

A. Yes. The Electro-Motive Division finds it much easier to take our color number, and if they need a hundred gallons, send us an order.

The alternate to that would be to get us to send a color card in, send that to some other person, have them make a match. It is much simpler to do it this way.

Q. Are you speaking of a case in which a railroad has designated your color number?

A. That is right.

Q. You mentioned a synthetic that is used to finish the interior of these engines. Does du Pont sell that to Electro-Motive?

A. No, we do not.

Q. You also mentioned the varnish that is used by Electro-Motive. Does du Pont sell that varnish to Electro-Motive?

A. No.

Q. Does Electro-Motive have any use for thinners in connection with its finishing of these engines?

A. Yes. The application of the "Duco" color coat requires a large amount of thinner.

Q. Does du Pont sell thinner to Electro-Motive?

A. Oh, sometimes we do and sometimes we don't. At the present time I don't believe we have any of the "Duce" type thinner.

[fol. 4876] Q. Do you know where Electro-Motive buys its thinner?

A. They buy it from a local concern in Chicago.

Q. Do you know where Electro-Motive buys the synthetic finish which is used on the interior of a Diesel?

A. Yes. They buy it from Rinshed-Mason.

Q. Do you know where they buy the varnish that you spoke of?

A. Yes, the Sterling Varnish Company.

Q. Now, Mr. Fisher, I would like to direct your attention to Packard Electric, which is another division of General Motors.

What business is carried on by that division, if you know?

A. They make electrical cable, wiring harnesses and small motors.

Q. When did you first have anything to do with the Packard Electric Division of General Motors?

A. In late 1929.

Q. Was that when you were in the Ohio territory?

A. Yes.

Q. What did you do at that time in relation to Packard Electric?

A. I was the industrial salesman contacting Packard Electric.

Q. At that time was Packard Electric a part of General Motors?

A. No, they were not.

Q. Since you left or after you left the Ohio area, were you familiar with the business transactions, if any, between du Pont and Packard Electric? Have you followed that account?

A. Yes, I continued to have general supervision over it.

Q. What are the principal finish products that are used [fol. 4877] by Packard Electric or were used in 1929? Let's start with 1929.

A. In 1929 they used what is known as cable lacquer and a minor amount of varnish.

Q. Let me ask you the same question as of the present time. What finish products does the division use at the present time, if you know?

A. They use cable lacquer, considerable quantities of varnish, and wire enamel.

Q. What product does du Pont today sell to Packard Electric, if you know?

A. We sell them wire enamel only.

Q. Do you sell them any insulating varnish?

A. No.

Q. Do you sell them any cable lacquer?

A. No.

Q. Is there more than one type of cable lacquer, Mr. Fisher?

A. Yes. Cable lacquers can be classed according to the types of cable.

I might explain that cable consists of a copper wire surrounded by a sheet of some type, rubber composition, sometimes covered with a fabric and sometimes with lacquer. That lacquer may either be a low tension lacquer or a high tension lacquer. Low tension means where the cable is used for the lighting system of the car. High tension where it is used for the ignition system.

Q. What is the purpose of these lacquers? Why are they applied to the cables, Mr. Fisher?

A. Somewhat to insulate, and mostly to protect the insulation.

Q. How are they applied to the cable?

A. They are applied by dipping operation, passing the cable through a bath, then wiping it off with a die or a nipple.

Q. Is this lacquer that you are speaking of that is applied to cables the same kind of lacquer, generally speaking, that has been referred to in this case as "Duco"?

A. No. No, it is not.

[fol. 4878] Q. What is the difference between this cable lacquer and "Duco" type lacquer?

A. "Duco" is based on the use of low viscosity nitrocellulose as covered by the Flaherty patent, whereas these materials are based on high viscosity nitrocellulose or other cellulose products.

Q. Mr. Fisher, you testified a moment ago that you first began to deal with Packard Electric in 1929. Was du Pont selling them anything at that time?

A. Yes. Prior to my taking over, du Pont had sold them large quantities of low tension, but at the time that I took over we were selling them the black high tension cable lacquer.

Q. That was in 1929?

A. In 1929.

Q. Do you recall how or when or what the circumstances were that led to the sales of the black high tension lacquer that you have mentioned?

A. Yes. Just about the time that I went there, we had developed a very outstanding black high tension cable lacquer, and it had had a combination of heat resistance, oil resistance, cold crack resistance, and also good working properties.

Q. How much of the Packard Electric Company's requirements of black high-tension lacquer did du Pont sell in 1942, roughly, if you remember?

A. We sold the entire requirements except for trial runs that they gave competitors.

Q. For how long, if you know, did you continue to supply Packard Electric with all of its requirements of black high-tension lacquer?

A. That continued until 1933.

The Court: The Court will now recess for fifteen minutes.

(Whereupon a recess was taken.)

[fol. 4879] By Mr. Cox:

Q. Mr. Fisher, before I continue with the questions about Packard Electric, I should like to revert for a moment to your testimony about your sales to the Electro-Motive Division.

You testified that you did not sell them the synthetic that was used on the interior, and that you did not sell them varnish, is that correct?

A. That is correct.

Q. Do you make the kind of synthetic finish that is used on the interior of those locomotives?

A. Oh, yes, and would very much like to have that business.

Q. You tried to sell Electro-Motive?

A. Yes.

Q. Do you make the kind of varnish that Electro-Motive uses?

A. We make that type of general varnish. Those are varnishes that require a lot of specialized laboratory work, and we certainly are in a position to do that.

Q. Have you tried to sell Electro-Motive varnishes of that kind?

A. Yes.

Q. Now, I will return to the questions I was asking you about Packard Electric, and I think you just testified beginning in 1929 that du Pont Company had all of the black high-tension lacquer business of Packard Electric, and that continued until some time in 1933, is that correct?

A. Yes, about the middle of 1933.

Mr. Cox: At this point I should like to introduce a document which has been marked du Pont Exhibit No. 333 for identification, which is the report dated January 14, 1932.

(Said document, so offered and received in evidence, was marked du Pont Exhibit No. 333.)

[fol. 4880] Q. Is this the report that you made, Mr. Fisher?

A. Yes, this is known as Industrial Sales Trade Report.

Q. Now, will you look at the face of that report, and particularly at the words and figures that appear at the left hand side, and I call your attention to the two entries there that relate to du Pont.

Do you see them?

A. Yes.

Q. Now, which of those entries relates to the high-tension black business that you just referred to?

A. The entry that is marked "CL. blk;" that means "Carloads, black," price, \$1.85 from du Pont; approximate consumption 15,000 gallons.

Q. What is the next item below that that has to do with du Pont?

A. The next item below is in the wrong line, and that is "3125" thinner, .80, and from du Pont.

Q. Was this report made at the time when Packard Electric was part of General Motors, or was it before?

A. This is before it became part of General Motors.

Q. Was this report made at the time when du Pont had all of the black high-tension lacquer business?

A. That is correct.

Q. Now, I should like to have you look at a passage that appears on the reverse side of the report, the two center paragraphs in the page, and I particularly call your attention to the second of those paragraphs—although I should like to have you look at both of them, Mr. Fisher—and I am now going to direct your attention specifically to the last two sentences of the second paragraph which reads as follows:

"While, as you state in your recent memo, Snyder is friendly to both F. S. and Arco, it is true, but the [fol. 4881] only competitor we have on Black at present is Arco. There are dozens of lacquer people calling here who never even get a chance to discuss their product, let alone a chance to have samples tested or to find out what Packard's requirements are."

What do the letters "F. S." mean in that paragraph?

A. That is Ferbert Schorndorfer.

Q. Is that a company that made lacquer?

A. That is a lacquer and paint company that is located in Cleveland.

Q. Now, do those sentences state accurately your impression at that time of the purchasing policy of Packard Electric?

A. Yes, essentially.

Q. And you say that this was before Packard Electric became a part of General Motors?

A. That is correct.

Q. Now, was there any change in your observation in the purchasing policy after Packard Electric became a part of General Motors?

A. Yes, I would say there was a rather basic change.

Q. What was that change, Mr. Fisher?

A. As an independent, Packard Electric felt that the three suppliers, Ferbert, Arco and du Pont, were expert in the

field of cable lacquers, specialists in that field, and they thought that that was enough. They wanted to stimulate competition among those three, but they felt that other people in the lacquer business might come in there and claim to know something about it, about cable lacquers; they felt that actually they didn't have a whole lot of experience, and that Packard could not afford to spend the time and effort testing the products of anybody who came in and claimed they had something.

[fol. 4882] Q. Is that the policy to which you were referring when you said in this report, "There are dozens of lacquer people calling here who never even get a chance to discuss their product"?

A. That's right.

Q. Now, what change took place in that policy in your observation after Packard Electric was acquired by General Motors?

A. General Motors opened it up to a great extent.

Q. What do you mean by "opened it up"?

A. Well, when suppliers came in, well-known lacquer companies, a lot of concerns were nationally better known than these two, and they got a chance to send in samples and they gave them the details of their requirements, and eventually more people got specified or approved.

Q. I would like to call your attention also to a statement that appears in this same paragraph in which you say:

"According to my records their total purchases have been in excess of \$25,000 for 1931."

Is that a reference to the black high tension lacquer business, or is it a reference to all of their requirements, if you can tell from the context?

A. That is all of their requirements, but it was practically all black high tension.

Q. In your activities in your business at that time, was that a large or small account?

A. That was a very large industrial account.

Q. Now, you have told us in 1933 there was a change in your relationship with Packard so far as black high tension lacquer was concerned. What was that change?

A. Well, in 1933, they started buying lacquers of a considerably higher heat and oil resistance. As a matter of fact,

[fol. 4883] the testing of such lacquers had started in 1932, and we had submitted such products. That change was essentially due to the introduction of a new resin which was available to a number of people.

Q. Did you lose the black high-tension lacquer business?

A. We lost the business in the middle of 1933.

Q. Who got the business, if you know?

A. First, it was Arco.

Q. Did you lose the business before or after General Motors bought Packard?

A. After.

Q. For how long did the situation continue which you have just described, that is, during the time you were not selling any black high tension?

A. From the middle of 1933 to sometime in 1936. We sold to Packard Electric, but not in quantities; that is those cases where you have a trial run. Where you have a volume, and working properties, we really never got up to where we got the material approved on all counts until about the beginning of 1936.

Q. Before I come to that, I should like to introduce a document which has been marked du Pont Exhibit 334.

(Said document, so offered and received in evidence, was marked du Pont Exhibit No. 334.)

By Mr. Cox:

Q. Is this a report you made, Mr. Fisher?

A. Yes, sir.

Q. Now, at the time this report was made, who was getting the black high-tension lacquer business?

A. Arco was getting it.

Q. As shown——

A. As shown in the second line down.

Q. What business does this report indicate that du Pont [fol. 4884] was getting from the Packard Electric at the time of this report?

A. It indicates nothing but varnishes.

Q. Was this report made before or after General Motors had bought Packard Electric?

A. After.

Q. Now, Mr. Fisher, you have said a moment ago, in 1936, there was a change in the black high tension lacquer business.

What happened at that time, in your relation with Packard?

A. In 1936, we started to get larger production amounts until sometime within about a year, we again became the preferred supplier.

Q. You say you became the preferred supplier?

A. Of black high-tension.

Q. Of black high-tension?

A. Yes.

Q. Can you estimate at that time how much of the Packard Electric requirements of that lacquer you were supplying?

A. Well, in certain periods between 1936 and the next few years, we got 50, maybe 75, per cent of the business—I don't think 75, about 50.

Q. Had your lacquer improved in quality between 1933 and 1936? I am asking about the black high-tension lacquer.

A. Our production lacquer had improved greatly.

Q. What do you mean by production lacquer?

A. We had submitted samples during that early period which was essentially the same as the lacquer on which we obtained the business later.

Q. You mean samples you had submitted at an earlier date, were they equal in quality to the samples of lacquer that Packard Electric was using?

A. There were many periods during that time when I felt, [fol. 4885] and had good reason to believe, that our product was equal in quality to that that was being used.

Q. Are you now referring to the period before you got half of the business?

A. That is right. I am referring to the period from 1933 to 1936.

Q. How long did you continue to supply a large part of Packard Electric's requirements of high-tension black lacquer?

A. Until about 1939.

Q. What happened at that time?

A. Well, in 1939 the requirements of heat and oil resist-

ance were again upgraded. A competitor came along and gave them a lacquer of considerably higher heat and oil resistance, and they got the business.

Q. What competitor was that?

A. I believe that was the Standard Varnish Company.

Q. Now, do you know, after that time, that is to say roughly after 1939, how much of the requirements of the Packard Electric Company for black high-tension lacquer was supplied by the Standard Varnish?

A. Practically all, for a considerable period.

Q. How long did that continue?

A. Well, that continued until the war.

Q. Throughout that time, did you continue to attempt to sell black high-tension lacquer to Packard Electric?

A. Yes, sir.

Q. Were you ever able to sell any in production quantities during that period?

A. Only for trial runs. We finally had a material that was approved, however.

Q. When you say "approved", what do you mean by that?

A. Approved as to quality.

[fol. 4886] A. Approved by whom?

A. Approved by the laboratory people and production people.

Q. Whose laboratory people and production people?

A. The Packard laboratory people.

Q. They approved your lacquer, but they did not buy it in production quantities?

A. No.

Q. Now, Mr. Fisher, I should like to direct your attention to the other kind of high-tension lacquer that you mentioned, which was the clear.

Going back to the period before 1934, where did Packard Electric buy its clear high-tension lacquer?

A. They bought it from Ferbert Schorndorfer and Arco.

Q. Did you, prior to 1934, attempt to sell clear high-tension lacquer to Packard Electric?

A. Oh, yes.

Q. Were you successful in selling any to them?

A. No.

Q. Will you please show Mr. Fisher again the document that has been marked du Pont Exhibit No. 334.

Is there an entry on the face of that document that refers to the clear high-tension lacquer?

A. Yes. "Clear HT. FS. CO," meaning Ferbert Schorndorfer, "4,000 gallons."

Q. Did you thereafter 1934 get any business from Packard Electric for clear high-tension lacquer?

A. Yes. I might say that our clear had been approved during this entire period when we were getting the black business. In fact, it was a superior product. But the Packard Company did not feel the need for a superior product, for the clear, because that was a dealer item, and they wanted to keep other people in the picture. So they gave the business, or had given it, to Arco and Ferbert Schorndorfer. [fol. 4887]

Q. What do you mean by a dealer item?

A. That means that the cable was sold to dealers for replacement use on automobiles as distinguished from sale to the automobile manufacturer.

Q. Was all the cable on which the clear high-tension lacquer was used sold to dealers?

A. Practically all.

Q. None of it used in production?

A. No.

Q. You again say that your clear high-tension lacquer was approved. Approved by whom, by Packard?

A. Approved by the Packard production and laboratory people.

Q. About what time, if you recall, was that approval given?

A. Oh, we got small amounts all during the period from 1929 to 1934. You would always try to get a drum just to keep on the list.

Q. Did the time come when they bought clear high-tension lacquer from you for production?

A. Yes, sir. In 1934 they recognized the need for a higher quality clear, and so they started to buy from us.

Q. Do you know how much of their requirements they started to buy from you at that time?

A. Eventually they bought most of their requirements.

Q. This is their requirements for clear high-tension lacquer?

A. Yes.

Q. How long did that continue?

A. That continued until about 1936. In 1936 a new material came into the picture, ethyl cellulose.

That was a product that we had been familiar with and we knew it would produce a top quality lacquer, but had always been discouraged from offering it because it was very expensive.

In fact, such a lacquer cost, roughly, twice what the other [fol. 4888] clear lacquer cost. But a competitor became approved and started getting business in 1936.

Q. What competitor was that?

A. The Glidden Company.

Q. Did you thereafter try to sell an ethyl cellulose lacquer to the Packard Electric Company?

A. Yes, sir, we tried and finally had it approved.

Q. Did you sell a lacquer of that kind to them?

A. No, we never secured any business.

Q. By 1939, were you selling any clear high-tension lacquer to Packard Electric at all?

A. We continued for a time to sell the lower quality clear high-tension at the lower price for certain outlets where that was sufficiently good. But that business disappeared about 1939.

Q. Did you continue thereafter to solicit Packard Electric's business?

A. Yes.

Q. For clear high-tension lacquer?

A. All items, yes.

Q. Did you get any business from them for that lacquer?

A. No, our business began to disappear by 1940.

Q. After the war did you solicit any business from Packard Electric for clear high-tension cable lacquer?

A. Yes. We solicited business after the war based on the same products that had been approved prior to the war.

Q. Have you been successful in obtaining any business from Packard Electric since the war on this lacquer?

A. No.

Q. Mr. Fisher, now I want to direct your attention to the low-tension cable lacquers that you mentioned in the beginning of your testimony.

[fol. 4889] You said, I think, that in 1929 when you first dealt with Packard, it had been buying low-tension cable lacquers from du Pont, is that right?

A. Yes.

Q. Who had developed those lacquers, if you know?

A. Well, the du Pont Company had been a pioneer in the idea of using lacquer for protecting cable, and certainly should receive part of the credit for having developed such lacquers.

Q. Did you attempt to sell low-tension cable lacquer to Packard Electric in 1929 when you first dealt with them?

A. Yes. One of my first assignments was to try to get Packard to sign a year's contract for low-tension cable lacquer.

Q. Were you successful in that effort?

A. No. They told me that they felt that inasmuch as we had the only approved black that we should be satisfied with the black business, which was the largest in dollar volume.

Q. Again, was this before or after GM acquired Packard Electric?

A. That was before.

Q. Did you continue your efforts after 1929 to sell them low-tension lacquer?

A. Yes.

Q. Were you ever successful?

A. Only to a very minor degree. In 1936 Packard found that the low-tension cable lacquer that they had been buying—that they had been making themselves based on film scrap was not satisfactory, and so they called us in and asked us to help them to try to get a heavier coating on it.

We experimented with them for several months. I remember this distinctly because it was the time that I turned the account over to Mr. Robertson, who succeeded me.

We added various things, principally a low viscosity nitrocellulose in order to try to apply a heavier film which

[fol. 4890] would still work in the high speed equipment that they had recently installed.

Finally they found, using suggestions that we had given them, that they could apply a satisfactory coating still based on the film scrap.

Q. Did you get any business from them after that development work?

A. We got no business based on that, nothing but good will. But a little later they discovered that they needed a still higher quality for certain dealer outlets, and so for a period of time we got some of that business.

Q. Was that, if you know, a large part of their requirements for low-tension lacquer that you got?

A. No, that represented less than 5 per cent of their requirements, and we shared it with someone else.

Q. You mentioned in your last answer that they had been making their own low-tension lacquer, Packard Electric had. When did they first start making their own low-tension lacquer, if you know?

A. They started experimenting in 1930. By 1931 they were making all of their low-tension lacquer.

Q. What were they using for that purpose?

A. A film scrap solution that they purchased from the Eastman Kodak Company.

Q. Did they always buy that from the Eastman Kodak Company, or did they change suppliers?

A. There were times when they bought it from the Arco Company. It was still based on film scrap, but the Arco Company reduced the viscosity for them.

Q. Now, after they started to make their own low-tension [fol. 4891] lacquer, did you attempt to get that business from them again?

A. Oh, yes.

Q. Did you try to persuade them to buy from you before General Motors bought Packard Electric?

A. Yes, before and after.

Q. Were you ever able to persuade them to buy their low-tension lacquer from you rather than making it themselves?

A. No. In fact, I can tell you that on one occasion we

were so anxious for business that we quoted them a price about two or three cents a gallon over what they had told me their manufacturing cost was. But we did not get any business.

Q. Did you ever try to get their business for film scrap solution?

A. Yes, we talked about it.

Q. Were you ever able to get any of that business from them?

A. No.

Mr. Cox: I should now like to offer the document that has heretofore been marked for identification du Pont Exhibit No. 335, which is a report dated May 8 and May 9, 1936.

(Said document, so offered and received in evidence, was marked du Pont Exhibit No. 335.)

By Mr. Cox:

Q. This report was made by Mr. Robertson. Is that the Mr. Robertson you referred to a moment ago?

A. Yes.

Q. Will you examine this report and tell us whether it refers to the incident that you described in your testimony, that is to say, the incident involving your work with Packard Electric?

A. Yes. In the next to the last paragraph it says:

[fol. 4892] "It now appears that Litman will be able to use his regular film scrap material (by following leads suggested by us in our blends) for making cable for auto manufacturers.

That is the incident that I referred to.

Q. I think you also said that you thereafter did get a certain amount of their business for certain kinds of low-tension lacquer that they were selling to certain dealers, is that right?

A. Yes. The report continues, and it has reference to it, "however, he still expects to use a better finish on dealer

cable and we have a good chance of getting this portion of the business if we can supply a satisfactory product at a reasonable price."

Q. And you did get some of that business?

A. Yes.

Q. Did anyone else get any part of that business?

A. Yes, the Arco Company got some of it.

Q. How long did you continue to get that part of Packard's business for low-tension cable lacquer, if you remember?

A. For about two years, possibly a little over.

Q. Then what happened?

A. Well, then they found out that they could apply these heavier coats with existing film scrap solution, with the low tension made of their own manufacture based on film scrap solution, so they stopped buying from us.

Mr. Cox: I should now like to offer the document which has been marked for identification du Pont Exhibit No. 336, which is another report prepared by Mr. Robertson, and is dated 9/11/41.

(Said document, so offered and received in evidence, was marked du Pont Exhibit No. 336.)

[fol. 4893] By Mr. Cox:

Q. I ask you to look at this document, Mr. Fisher.

At the time this report was written, was du Pont getting any business at all from Packard Electric?

A. A very small amount under the heading of Roxylin and others, we would come in under the term "and others".

Q. Can you give us any estimate of how much business that was at that time?

A. Oh, possibly \$1,000.00, \$1,500.00 worth a year.

Q. What kind of lacquer was that that you were selling to them at that time?

A. That was a black, apparently, because 6233 is our number.

Q. Do you know whether your black was still approved by Packard Electric as of the date of this report?

A. Yes.

Q. Now, based on this report and on the volume that is shown on it, can you give us any estimate as to what the total dollar volume of Packard Electric's requirements for lacquers was in the year 1941?

A. Well, this report would indicate that it is about \$200,000.00. I would say it was somewhere between \$200,000.00 and \$300,000.00.

Q. Do you know whether Packard Electric's production has increased or decreased since the war?

A. It has increased very greatly.

Mr. Cox: You may cross examine.

Mr. Harris. There is just five minutes, your Honor. It would be a convenience if I could start this afternoon.

The Court: Very well.

[fol. 4894] Cross Examination.

By Mr. Harris:

Q. Directing your attention first, Mr. Fisher, to the Electro-Motive. Now, the exterior "Duco," you have had from 70 to 75 per cent all along of the requirements?

A: 70 to 75 per cent, yes.

Q. When did Electro-Motive set up in business, if you know? If you don't know, it is immaterial.

A. Well, it is a number of years ago. I cannot tell you exactly.

Q. Well, has it been in operation, and have you been selling to it during the time that you have been engaged, as you testified this morning, in your capacity as manager?

A. In my capacity as manager of industrial sales in Wilmington, I have only had contact for about two years.

Q. Now, when did you have the first contact with them?

A. The first contact was when I was in Chicago as a

regional manager of Industrial Sales which started in 1944.
[fol. 4895] -Q. 19 what?

A. The end of 1944.

Q. That was your first contact with them?

A. Yes.

Q. Do you know the record of their purchases before that time?

A. I am not familiar with it, but I do believe they bought from us.

Q. Now, Rinshed-Mason took the balance, did it?

A. The balance?

Q. The balance between 75 and 100 per cent of the exterior "Duco" or exterior finish?

A. At what period are you speaking of now?

Q. Well, the period that you testified to this morning. I am just reading from my notes. How long has Rinshed-Mason had the balance that you didn't have, of the exterior finish?

A. Well, I testified this morning that Rinshed-Mason had the principal portion of what we did not sell of colored exterior finish.

Q. That is what I thought.

A. During the present period. Now, by that I meant during the period of the last few years.

Q. That's right, and that would be around 25 per cent, wouldn't it?

A. 25 to 30 per cent.

Q. Yes. Now, the interior finish, what kind of finish did they use for the interior? I think you called it synthetic something.

A. Yes, they used a synthetic comparable to our "Dulux."

Q. Comparable to what?

A. Our "Dulux" finish.

Q. From whom did they get that?

A. Rinshed-Mason.

Q. Now, you had tried to get that business, had you?

A. Oh, yes.

Q. Was the price of Rinshed-Mason better than yours?

A. I would not think so.

[fol. 4896] Q. Do you know?

A. We are competitive in other parts of the country with them.

Q. I am speaking now of the purchases by Electro-Motive. Was the Rinshed-Mason price lower than yours for this synthetic finish?

A. I do not know.

Q. I see.

Now, you spoke of the Electro-Motive using varnish. Where did they use the varnish?

A. Well, a piece of electrical equipment has lots of coils and motors that were where insulation is a most important factor.

Q. And are these the parts where the varnish that you testified about, were used?

A. Yes, on the electrical portion.

Q. Are these the parts that require specialized products?

A. Yes, they require a specialized varnish.

Q. And that specialization is according to certain specifications, is it not?

A. The specifications are not spelled out in complete detail. It requires cooperation between the varnish maker and the user, Electro-Motive.

Q. Who sells this specialized varnish to Electro-Motive?

A. Sterling Varnish Company.

Q. Yes? As a matter of fact, du Pont never did, did it, prepare a varnish according to that formula, the formula used by Electro-Motive?

A. Yes; we have had varnishes that, in our opinion, Electro-Motive could use. It is incorrect to speak about a formula that they prepared, because we make the formula.

Q. I am speaking now of the varnish that is sold by Sterling. You have not made that particular varnish, have you?

A. Yes, we have. There are many varnishes, I should say, and we have formulated a number of products.

[fol. 4897] Q. And as I understand your testimony this morning, Mr. Fisher, you stated that "we could have done it, if we wanted to". Am I right in remembering that when you spoke of this specialized laboratory job, you said "we could have done it."

A. I don't think I said, "We could have done it." I think I said, "If we had wanted to."

Q. What did you say, if you recall? Did you say, "We had done it"?

A. I said that we had laboratory facilities capable of formulating insulating varnishes for any requirement.

Q. Did they do it for Electro-Motive?

A. Yes.

Q. And was it accepted by Electro-Motive?

A. They did not purchase any.

Q. Did they accept it and give it the okay, or whatever you call it, the approval?

A. Well, I cannot recall. I believe that they certainly have approved some of them.

Q. I am speaking about a specialized varnish which you say required laboratory work. Now, did they approve anything like that for you which was purchased from Sterling?

A. There is no one specialized varnish. There are a number of varnishes required for this work.

Q. Now, should we go to another subject?

Do you recall when General Motors took over Packard Electric?

A. Yes.

Q. When?

A. In the middle of 1932.

Q. Now, had you had anything to do with sales of Packard Electric at that time?

A. Yes.

Q. How long had you been selling Packard Electric?

A. From—I personally had been contacting them from November of 1929.

Q. And had du Pont sold them material up to the time [fol. 4898] that General Motors took over?

A. Yes.

Q. Now, I am calling your attention first to black high-tension, and I would like you to look at du Pont Exhibit No. 333.

This you have testified was your sales trade report of January 14, 1932?

A. Right.

Q. At which time it appears that the "CL black", du Pont sold 15,000 gallons—is that gallons?

A. Yes, it was.

Q. Now, who sold the high-tension black?

A. That was the high-tension black.

Q. I see. And what is the high-tension clear? I beg your pardon. You are right on that.

Who sold the high-tension clear?

A. Ferbert Schorndorfer, at that particular time.

Q. Now, I notice you say that, and I am calling your attention to the right-hand side of this document now, "An important reason why the customer buys from competitors"—and you have set down two reasons, "Quality," and "Friendship."

What was this quality that you were referring to?

A. Well, quality would include the film characteristics first. That means the ability to resist heat and oil and bending around a mandrel at a low temperature, plus the ability to have all of those three properties, and at the same time work with satisfactory equipment without sticking on the reels.

Q. Would that indicate from your statement that the company, the Packard Electric business, was obtained from competitors on the basis of quality, or that the quality was this [fol. 4899] time superior to the du Pont quality of that particular article?

A. I don't quite follow that question.

Q. Well, will you tell us then, please, what you meant by the statement that the competitor—that the customer bought from competitors on the basis of quality and friendship?

A. Well, that is a general statement, a general statement applying to all items that they buy.

Q. Well, is it referring to the fact that they buy from the competitor because the quality is better than du Pont's? Is that what you are referring to?

A. No, I am referring to the fact that they would buy from a competitor if the quality were better.

Q. Isn't that a record of what was actually being done by the customer and you are reporting it to your company?

A. That is a record of the customer's purchasing policy, giving important reasons why a customer or prospect buys from competitors. It says, "Quality" and "Price," and a man wants to know——

Q. Go ahead. I am sorry.

A. (Continuing): And the man reads the report and wants to know which one of those three factors are the important factors. Sometimes it is all three, and in this case I wrote down "Friendship."

Q. And you wrote down "quality"?

A. Yes, quality. It has to have quality.

Q. Wasn't your competitor Arco?

A. Yes.

Q. Now I call your attention, if you please, to the third paragraph on the back of this document:

"I think that if it is at all possible, it would be very good policy to make a small price reduction. Even [fol. 4900] though we have not had all of Packard's Black business for 1931, the total volume has been very attractive. Prices have always been on a profitable basis with no haggling whatsoever. While, as you state in your recent memo, Snyder"——

Who is Snyder?

A. That was Mr. J. A. Snyder, the purchasing agent of Packard Electric.

Q. (Reading):

"—Snyder is friendly to both F. S. and Arco, it is true, but the only competitor we have on Black at present is Arco."

Was the Arco quality any different from yours at the time?

A. Yes.

Q. Was it better, or not?

A. Not as good.

Q. Then why were they buying on the basis of quality from Arco?

A. If you will read this sentence, it refers to Black.

Q. Sir?

A. It refers to Black. This paragraph speaks of Black.

Q. That is not the material that you are talking about when you are talking about quality?

A. Any material that the customer purchased had to have quality, whether they bought it from us or from a competitor.

Q. Shall we pass to something else? I don't think we are getting through on some of these questions.

Will you give the witness the next report, which is numbered for identification Government's Exhibit No. 1319. This is known as du Pont's No. 2 on List No. 3, a document which was furnished to the Government.

[fol. 4901] Will you look at that document, Mr. Fisher? It is an excerpt from Industrial Sales Trade Report, a call made by you, I take it, or whoever made this—did you make this?

A. I can't tell from this excerpt whether or not I made it.

Q. Whether it was you or not?

A. Right.

Q. All right, but in October, 1932, were you calling on Packard?

A. Yes.

Q. They are talking about two products, are they not, a clear and a black, is that right?

A. Which part of the page are you speaking of? Under what paragraph?

Q. Right at the beginning, "Purpose of call. Follow up on X-62-7 clear."

A. That is right.

Q. What was X-62-7 clear?

A. That is a high-tension clear lacquer.

Q. What was X-62-8 black?

A. That was a high-tension black lacquer. Both of those—when they have an "X" in front of them, it means experimental materials.

Q. I call your attention to the result in No. 1, the first paragraph, that X-62-7 did not show up well on certain tests, right?

A. Yes.

Q. Now I call your attention to the third paragraph:

"It is reported that Arco has cut price on 13½ per cent film scrap solution to fifty-six or fifty-seven cents. If so, would we be interested in meeting that figure?"

Now, did you find in your attempt to sell the du Pont product that sometimes your competitors were selling a similar product at a lower price?

A. A similar product?

Q. Yes.

A. You always find that.

Q. Did you find it in dealing with Packard Electric?

A. Naturally, a similar product sometimes at a lower price, but that doesn't mean it is the same product.

[fol. 4902] Q: You could say yes, could you not, to that question? If you will let me rephrase it.

Did you find in your dealings with Packard Electric that competitors were selling to Packard Electric a similar product to du Pont's at a lower price?

Will you answer yes or no, please?

A. I can't answer that categorically yes or no.

Mr. Cox: I object to the question.

Mr. Harris: He said he can't answer it. Now, answer the best way you can.

Mr. Cox: I object to the question unless the product and time are specified.

By Mr. Harris:

Q. I will specify high tension black, and I will specify the time in 1932 on more than one occasion.

A. The answer is no.

Q. You did not find at any time that your competitors were charging a lower price than du Pont?

A. For a satisfactory product?

Q. I didn't say that. I said a similar product.

A. Well, if you would define that word "similar". If by similar you mean something unsatisfactory but similar, that might have been the case. I don't know.

Q. So that we understand from your answer that if the product were being charged at a lower price to Packard Electric, though it is similar, it is not as good a quality as du Pont's?

Mr. Cox: May we have the question read, please?

(Question read.)

[fol. 4903] The Witness: Could you put that a little simpler?

By Mr. Harris:

Q. Yes. Did you find any competitor ever sell a product similar to du Pont's of equal quality at a lower price than du Pont?

A. We were speaking about black high tension. Now it is general.

Q. Yes, I will call it black high tension.

A. Let me tell you then. Our product was satisfactory, the only satisfactory product during the period that I am talking about.

Q. Now let us take another product that you were selling during this period.

Let's take the clear. You were selling that, weren't you?

A. No.

Q. What were you selling?

A. Black high-tension.

Q. Is that all?

A. Oh, small amounts of varnish and thinner. But black high-tension was the main product.

Q. I call your attention to Government's Exhibit No. 1320. That is your report of December 15, 1932.

Were you selling at this time film scrap solution?

A. No.

Q. What is this item on the back of the page of this document called "Film scrap solution. We finally met the Arco price of 56 cents."

What are you talking about there?

A. That is a film scrap base which has been reduced by the addition of thinner to the desired viscosity, to the viscosity desired by Packard. They added oils or plasticizers to that to produce the low tension cable lacquer.

Q. What do you mean by saying "we finally met the Arco [fol. 4904] price of 56 cents"?

Was the Arco price lower than your price?

A. It had been lower—

Q. I say was it lower? Was it lower than your price? You said it had been lower?

A. I can't tell you. Actually what happened, I believe, was that I had some haggling with the office. I knew what this Arco price was, and I had to do some selling at the office to get them to meet the Arco price.

Q. Do I understand from that that the Arco price at that time was lower than the du Pont price for this product?

A. I can't recall whether we had actually quoted or not. We were not selling them any. We were not selling this item.

Q. When you say you met the Arco price, what do you mean by that?

A. I mean that we quoted what, in my opinion, was the Arco price.

Q. And by meeting it, did you have to come down, or go up?

A. I imagine we had to come down.

Q. Was Arco a competitor?

A. Yes, sir.

Q. I call your attention to du Pont Exhibit 334. This is another of your reports of the 7th of May, 1934. What you are talking about there apparently is clear film, black high-tension, and clear high tension. Am I right on that?

A. These are the materials tabulated in the consumption figures.

Q. Are those the materials that du Pont was trying to sell to Packard Electric?

A. Yes.

Q. In 1934, is that right?

A. Yes, sir.

Q. What do you mean by the phrase, "All three" referring to why this customer or prospect bought from com-[fol. 4905] petitor, "(quality, service and price.)" Did you mean by that that your competitors were selling better quality, that they gave as good or better price at a lower price than du Pont for this material?

A. No.

Q. What did you mean by it?

A. I meant in the opinion of Packard Electric Corporation at that time the competitors had a superior quality service price.

Q. Yes. Do you know whether they did or not?

A. I believe not; I didn't believe it.

Q. Why did you put it down then?

A. It says why. Because Packard Electric Company thought that, but that does not make it a fact.

Q. You record, do you not—I think we are both talking English—you record, do you not, that the customer which was Packard Electric, bought from the competitor, which was Arco, F. S. Company and Eastman, on the basis of quality, service and price, rather than from du Pont. Have you an answer to that?

A. I am reporting to the office the information and the reason that the customer believes. It does not say it is a fact that either quality, service or price—they buy on what they feel, what they believe.

Q. Shall we go to the next, and I call your attention to the next document which has been marked for identification Government's Exhibit 1321. The next is No. 7 of the list 3 of the du Pont documents furnished to the Government, and this appears to be a trade report, and it is on the 24th of April, 1935, and you are talking about black high-tension.

I call your attention to the paragraph at the bottom on the right:

[fol. 4906] It appears that the ovens will be ready for testing by next Wednesday, May 1. The first concern offering a suitable material will get the business."

Now, what was going on at that time? Was there a sort of race between you and your competitors; du Pont and the

competitors to obtain a satisfactory product for Packard Electric?

A. Yes.

Q. Who did get there first?

A. A competitor was the first to be approved, both from a laboratory standpoint, which means film properties, and from a production standpoint. We were approved very early in the game from a laboratory standpoint, but unfortunately Packard Electric Company, at that time, considered us to be just another paint company, and they saw no reason—there were a great many competitors at this time, and they saw no reason to make a trial run of our product just because it was approved, any more than they would make one of anybody else.

Q. Did you ever get any of that business?

A. Yes, we got it eventually.

Q. I beg your pardon?

A. Yes, we got quite a lot of it.

Q. How soon after your product was approved?

A. Well, during this first year, 1935, I would imagine we sold them black high tension seven or eight times in lots of one to ten drums, if we had ten drums working. You would have a lot of argument to try to get them to place an order with you, I mean to try to get them to place it on their own terms.

Q. How long after your sample was approved—was it your production that was approved?

A. Yes.

[fol. 4907] Q. How long?

A. It is pretty hard to say that too, because you have to remember during this period the standards were steadily changing from a period of the middle of 1933 until about 1936.

Q. You were forever trying to catch up, is that right?

A. Yes.

Q. When you did, you got the business, is that right?

A. We were forever trying to get the material approved in production without—well, I will have to put it this way. We would be approved on a laboratory basis. Somebody else would be approved, a number of others. The other fellow would get a larger order, then possibly the other man might come in with a slightly different product, and

by the time we got approved, they could buy our material, the production standard had changed.

Q. Then you would get a chance to meet the new standard, wouldn't you?

A. Yes, we might introduce the new standard ourselves.

Q. Yes, and it would be acceptable?

A. Yes.

Q. And you would be first then in that case?

A. Not necessarily the first to get the business, the record shows we were not.

Q. But you did get the business, didn't you?

A. By 1936, we began to get a very substantial share because we had a material which worked better in production than any other.

Q. What do you call a very substantial share?

A. I think about 50 per cent.

Q. And you people, you and your competitors were running neck and neck, weren't you, in quality?

A. Well, you could not say neck and neck.

[fol. 4908] Q. You mean you were way out in front?

A. When you say competitors, broadly speaking, by that time there were eight or nine that were after that business.

Q. And you got 50 per cent out of the eight or nine competitors?

A. Yes, sir.

Q. And they got the rest, is that right?

A. Yes, but at that time, our material worked better.

Q. You saw to that, didn't you? You saw to it that it would work better, didn't you?

A. I mean that they could run it in production in a very foolproof manner.

Q. Yes.

A. We had no control over their operating—

Q. A little louder, please.

A. We had no control over the operation of their equipment.

Q. You mean it was working better on their equipment?

A. That is correct.

Q. And that would be the same with your competitors, wouldn't it?

A. The working properties are an important part in a thing of this kind.

Q. How long did you continue to get 50 per cent of their business?

A. Well, we didn't, continuously. We got as much as 50 per cent until about 1939.

Q. What happened then?

A. In 1939, a product of still higher heat and oil resistance came into the picture.

Q. By another company?

A. By another company.

Q. Then what?

A. So we lost the business.

Q. For how long?

A. We never regained any substantial portion of it. We never got any more except a trial quantity.

Q. Did they continue to buy high-tension black after the war?

A. No.

[fol. 4909] Q. They didn't, did they?

A. No, sir.

Q. Did anybody?

A. No, sir.

Q. It was an obsolete item, wasn't it?

A. That is putting an unfair construction on it.

Q. All right. You have answered it anyway.

A. I would not say it was an obsolete item.

Q. Now, calling your attention to du Pont Exhibit No. 335, I call your attention to the last paragraph before the letter "C". It was read to you by counsel, I believe, this morning:

"It now appears that Litman——"

Who is Litman?

A. Doctor Litman was a chemist.

Q. (Reading):

"—will be able to use his regular film scrap material for making cable for auto manufacturers."

This film scrap material that you say Packard was making for itself?

A. Yes.

Q. You gave it some helpful hints on how to do it, is that right?

A. Yes, sir.

Mr. Harris: (Reading):

"However, he still expects to use a better finish on dealer cable and we have a good chance of getting this portion of the business if we can supply a satisfactory product at a reasonable price."

By Mr. Harris:

Q. No, the du Pont Company would not expect, would it, any of the General Motors units, Packard Electric being [fol. 4910] a subsidiary, to buy an unsatisfactory product at an unreasonable price, would it?

A. No.

Q. Now, will you look at the next one?

I gave this a tentative number for identification Government's Exhibit No. 1322. It is List 3 No. 12 of du Pont documents, and this is dated 6-17-36. This is the report by Mr. Robertson who you testified was a salesman at that time, and I call your attention to the second paragraph under B on the righthand side. You are speaking now of apparently Dr. Litman:

"While he will probably use the same materials which Anderson does."

Who is Anderson?

A. Anderson means Anderson, Indiana, the plant of the Delco-Remy Corporation.

Q. That is the same material that the Anderson plant uses, is that right?

A. Yes.

Q. Were they furnished by du Pont?

A. Yes.

Q. He also wants a price, a lower price.

Would you say that the du Pont price at that time was higher than the competitors' price for—

A. That is something on which it would be impossible to generalize.

Q. I am asking you to merely read the sentence that is before you. He also wants a lower price. Does that mean you have to meet competitors' prices?

A. Not necessarily to meet competitors' prices. Let me explain if you insist on talking about it.

Q. Just before you start your explanation, let us see this lower paragraph, this bottom paragraph:

"I could make little headway with DeBolt——"

[fol. 4911] Who was DeBolt?

A. He was a purchasing agent at Warren, Ohio.

Q. Reading:—"On the possibility of increasing his takings of——." What is the black?

A. That means the black high tension.

Mr. Harris: (Reading):

"Other than his admission that he was trying to squeeze us further on price."

Now, do you know what that means?

A: Yes, I am pretty familiar with the tactics by purchasing agents in general.

Q. Yes. They try to get you, do they not, to lower your prices to what they say is the lower price of the competitor?

A. That is one way of doing it.

Q. Is it the correct way?

A. No, it is not the only way.

Q. Is it one way?

A. That is one way of putting it.

Q. Now, I call your attention to the next paragraph:

"Had a few minutes with Litman before closing time and learned the Black High-Tension Cable Lacquer situation is all up in the air again. Belden——"

Who is Belden?

A. That is a competitor of Packard Electric.

Q. A competitor of Packard Electric?

A. Yes.

Q. (Continuing):

"Belden is selling a Black H.T. cable which is far superior to Packard Cable in heat resistance and their sales department is raising an awful howl."

[fol. 4912] Then I call your attention further down to the next paragraph:

"Someone has already offered Packard a lacquer approaching the quality of Belden finish but it is

somewhat difficult to dry. We are going to have to move fast in doing likewise for there is no question in my mind but what Packard will be using a more heat resistant finish in the near future."

In order to get the business you would have to make a product that would embody this heat resistant quality, wouldn't you?

A. Yes.

Q. I call your attention now to du Pont Exhibit 336, to the back part of this document which is dated September 11, 1941, and it is a report by your Mr. Robertson, and he says that the competitive price level is still \$1.90. That material is what? Which of these various materials is that, do you know, that he is talking about?

A. That undoubtedly refers to a material of the quality of our 6233 black high-tension.

Q. (Continuing):

"and DeBolt expects us to fill this old order entered and accepted by us last June at this price."

Now, that means, does it not, that you would meet your competitors' price?

A. Yes, and in the meantime our price had been increased, and the new price of this lacquer is \$2.00.

Q. But the competitive level is \$1.90?

A. No, he doesn't say so. We took an order at \$1.90 [fol. 4913] and raised the price to \$2.00, and so DeBolt says: "You have to give me that stuff at the old price."

Q. Let's take this a little slowly. The date is September 11, 1941, and the statement is that on that day the competitive price level is still \$1.90.

I take it that du Pont had raised its price at that time?

A. That's right.

Q. And the competitor had not?

A. No, that's right. That would indicate that.

Q. And they tell you, "If you want to get the business you have to go back to \$1.90," don't they?

A. Yes, that is what he said.

Q. All right.

I call your attention now to Government's Exhibit No. 1323, which is a report by a Mr. Kadlac under "war service" dated—it looks like 8-24-42.

I call your attention to paragraph (B), and the date is 1942:

"Dr. Litman advised tests on the drum of 6233 Black ran fairly equal to present force."

Do you know whom they were buying from in 1942, for this black?

A. It might have been any one of about five people.

Q. You wouldn't know?

A. No.

Q. (Continuing):

"Advised it was pretty hard to tell on a one drum run just what the material was capable of doing. However, as the black is now practically an obsolete item with them"——

[fol. 4914] That is what we were talking about a few minutes ago, isn't it, Mr. Fisher?

A. Yes: I would like to explain that, though.

Q. Yes, sir?

A. It was obsolete because they decided to buy, a clear and color it themselves.

Q. Yes?

A. And make a product of their own manufacture out of the clear.

Q. Yes.

Now, I call your attention to a paragraph just before the last paragraph, and it is discussing the 6200-4922 and says that:

"Sunlight are going to produce their own."

What does that mean, "Sunlight are going to produce their own"?

A. I don't see that here, but——

Q. Will you look at the right-hand side, Mr. Fisher, and it is the second main column which begins: "The J 6200-4922."

Do you have it, sir, the second paragraph "The J 6200"?

A. Well, we are talking about Exhibit 1323?

Q. Right there, sir (indicating).

A. Oh, yes.

Q. Yes?

A. "Sunlight" means the Sunlight Division of Packard. Sunlight Electric Company had been the manufacturer of small motors.

Q. So what they say, and I think you say, that they are going to make their own——

A. Yes, it is not quite clear. Packard was across the street, but it is not clear whether Packard was going to make it for Sunlight or not.

Q. Yes. If you read on right down:

"Asked Litman why we were not getting some of the present business"——

I think that refers to 6200X-4964——

"—and who present suppliers were. He stated present [fol. 4915] main two suppliers were Ferbert Shorndorfer & Arco Co., and stated they had been working on this type materials for years with Packard but we would be given every consideration when occasion arose."

Did that mean what?

A. That referred to a blue metallic lacquer which was a specialized thing that came into the picture. Apparently we didn't go to work on it, at the same time these people did.

Q. O. K.

A. That was another big item.

Mr. Harris: Yes. If your Honor will excuse me for one minute.

By Mr. Harris:

Q. Mr. Harsha reminds me of a question I would like to ask you.

How long were you familiar with the purchasing policy of Electro-Motive. I am not quite sure whether you told us.

A. I did say that I was familiar with the purchasing policy of Electro-Motive. I have been familiar with the Electro Motive business——

Q. All right.

A. (Continuing)—in supervisory capacity since the year at the beginning of 1945.

Q. Well, do I understand that you, yourself, went out and sold them before 1945?

A. Not as a salesman, no.

Q. Well, this statement that you made that du Pont got from 70 to 75 per cent of the exterior finish, what part of time does that cover?

A. Oh, that would be the present time.

Q. You have no knowledge of the prior time, of any prior time?

A. Not exactly.

[fol. 4916] Q: I beg your pardon?

A. No.

Q. Why do you say "not exactly"?

A. Oh, in a general way I think it was probably about the same as this, but I don't know for sure.

Q. And that would mean way back to the beginning; is that your feeling that in a general way du Pont from the start got the 70 to 75 from Electro-Motive.

A. I couldn't express an opinion on that. I don't know.

Q. Do you have records in the du Pont Company showing what you got?

A. Yes, I believe we do.

Mr. Harris: That is all.

Pardon me, Mr. Cox. I would like to offer in evidence, if the Court please, Government Exhibits 1319, 1320, 1321, 1322, and 1323.

(Said documents, so offered and received in evidence, were marked Government's Exhibits Nos. 1319, 1320, 1321, 1322 and 1323.)

Mr. Harris: Thank you, your Honor.

Redirect Examination.

By Mr. Cox:

Q. Mr. Fisher, there are one or two questions I should like to ask you about the varnishes purchased by Electro-Motive.

Did I understand you to say on cross examination Electro-Motive uses several different kinds of varnish?

A. Yes.

Q. Have you ever attempted to sell varnishes of that kind to Electro-Motive?

A. Yes.

[fol. 4917] Q. What did you do when you attempted to sell those varnishes to Electro-Motive? How did you go about it?

A. At one time Electro-Motive, I recall, while I was in Chicago, was in some difficulty on the insulating varnishes. We had a man in our Chicago office who was quite an expert on such matters. We took him out there. Our regular salesman took him out, and he assisted them and consulted with them. We, with his help, formulated materials to offer.

Q. When you say you formulated materials, what do you mean? Did you make a varnish?

A. Yes, we made varnishes and submitted samples, but we never got any business. Apparently the competitor licked the difficulty, and so they saw no reason to give us any business.

Q. Do you sell varnishes of that general type to other persons?

A. Yes.

Q. I should now like to ask you a few questions about a number of these exhibits that have been introduced by the Government.

The first one I should like to call to your attention is the document that I believe has been offered and admitted as Government Exhibit No. 1322.

I call your attention to the paragraph on the reverse side of the exhibit that has to do with Belden and a lacquer it was using.

A. Yes.

Q. Did you about that time try to develop a lacquer comparable in quality to the lacquer that Belden was using?

A. Yes.

Q. Did you submit that lacquer to Packard Electric?

A. Yes.

Q. Did you get any business?

A. No.

Q. Do you know who did get the business?

[fol. 4918] A. That business went to—of black, to the Standard Varnish Company.

Q. I should also like to call your attention to a document which has been admitted as Government Exhibit No. 1323, which is another report which refers to the blue metallics. This report is dated 8/24/42.

Do you remember that document or would you like to look at it?

A. I would like to look at it.

Q. Did you ever sell any blue metallic to Packard Electric?

A. I don't believe we did.

Q. Now, I should like to call your attention to another document which has been offered and admitted as Government Exhibit No. 1320.

This is the document that contains a sentence with respect to film scrap solution. Will you look at that? Do you recall that incident?

A. Yes.

Q. I think you testified on direct examination that you reduced your price to 56 cents, is that right?

A. Yes.

Q. Did you thereafter get any business from Packard Electric on film scrap solution?

A. No.

Q. Do you recall that on your cross examination you were asked by Mr. Harris about giving what he called helpful hints to Packard Electric in the manufacture of low tension cable lacquers?

A. Yes.

Q. Were you responsible for that activity; did you carry it on?

A. Yes, I was there personally with Mr. Robertson. We worked with them for two or three months.

Q. Why did you do that, Mr. Fisher?

A. Good will plus there was a possibility that we might be able to sell them. There was a chance for a period that [fol. 4919] we could take one of our bases plus a film scrap and make a ready-to-use product.

Q. Were you ever able to make sales of that kind to Packard Electric?

A. No.

Mr. Cox: I think that is all.

Mr. Harris: I have just one question, your Honor.

Recross Examination,

By Mr. Harris:

Q. Will you show the witness, please, the document you just gave him, Government's Exhibit No. 1320?

Mr. Fisher, you were asked by Mr. Cox to look at the back of this document, Government's Exhibit No. 1320, and you stated that you finally met the Arco price of 56 cents, did you not?

A. Yes.

Q. And you also stated, did you not, that having done that you didn't get the business, is that right?

A. That is right.

Q. Will you read on, "Mr. Nye of Delco-Remy is so far unwilling to take this away from Arco at same price."

That, I take it, is Arco at 56, isn't it?

A. Yes.

Q. Then this sentence:

"Will not push as long as we get all the black which is more profitable."

Do we understand from that you thereafter did not go after that business?

A. We continually called at the Packard Electric Company. There are certain items that you push more than others. We did not push that item as hard as we did the black.

[fol. 4920] Q. No, you had the more profitable business, didn't you?

A. Yes, we had the more profitable business.

Q. Would that explain, you think, in part why you didn't get the business, because you didn't push it?

A. No, I don't think it would.

Mr. Harris: All right. That is all, your Honor. Thank you.

Mr. Cox: That is all, Mr. Fisher.

(Witness excused.)

Mr. Gribbon: In line with the statement made by Mr. Cox this morning, your Honor, we propose now to turn to the remainder of the case dealing with the du Pont efforts to sell refrigerator finishes.

At this time we will call as a witness Mr. Norberg.

O. E. NORBERG, called as a witness on behalf of the Defendants, having been first duly sworn, was examined and testified as follows:

Direct Examination.

By Mr. Gribbon:

Q. Will you state your name, please?

A. O. E. Norberg.

Q. By whom are you employed, Mr. Norberg?

A. The Crosley Division of the Aveco Corporation. Aveco Manufacturing Corporation.

Q. For how long have you been employed by Crosley?

A. Since 1941.

[fol. 4921] Q. What does Aveco stand for?

A. Aveco is a contraction of the original name of the parent firm, the Aviation Corporation, and after going out of the aircraft business after the last war, the contraction was made to Aveco.

Q. You are affiliated with the Crosley Division of Aveco?

A. That is correct.

Q. For how long have you been employed—did you tell me that?

A. Yes, since 1941.

Q. And prior to that, were you employed in the refrigeration industry?

A. Yes, I was.

Q. By whom?

A. Two years prior to that by the Gibson Refrigerator Company at Greenville, Michigan, and then for about eight years prior to that at the Norge Division of Borg-Warner.

Q. Where are your headquarters now?

A. Cincinnati, Ohio.

Q. What appliances are manufactured by Crosley?

A. Refrigerators, ranges and home freezers.

Q. Where do you manufacture them?

A. We manufacture refrigerators in Cincinnati and Richmond, Indiana. Ranges and freezers are manufactured at our Nashville, Tennessee, plant.

Q. Do your duties as director of appliance engineering include supervision over the selection of finishes to be used on your appliances?

A. Yes, that is right.

Q. When did Crosley commence to manufacture household refrigerators?

A. In 1935.

Q. When did it commence to manufacture freezers?

A. 1946.

Q. At the present time what finish is Crosley using on [fol. 4922] its refrigerators and freezers?

A. Du Pont "Dulux" enamel.

Q. That is both the primer and top coat?

A. Both primer and top coat; that is correct.

Q. Do you know what percentage of your requirements of "Dulux" Crosley buys from du Pont?

A. 100 per cent of our requirements of this material.

Q. 100 per cent of your requirements of synthetic enamels for your refrigerators and freezers is bought from du Pont?

A. Yes, that is correct.

Q. Has Crosley always purchased 100 per cent of its requirements of finishes for its freezers and refrigerators from du Pont?

A. There have been a few periods during the past two years when we have made what we call trial runs of competitive materials of a similar nature. We have run these trial runs of Jones-Dabney material, which is also a synthetic enamel.

But our primary source almost 100 per cent, very close to 100 per cent, is the du Pont "Dulux" material, which we have used since we went into production of refrigerators back in 1935. In the case of the freezers, we have never used anything but "Dulux."

The trial runs were only on the refrigerators.

Q. Will you explain the function or the properties of the exterior finishes on a refrigerator?

A. Yes. The finish on a refrigerator, unlike on almost any appliance, automobile or anything of that nature, is not primarily an appearance factor. It is more important to consider it as a protective coating for the metal, of which the article is constructed.

For that reason, while we do demand a high gloss, good [fol. 4923] adhesion, and all the other properties we speak

of technically in finish, one of the most important is a high quality that will withstand the wear and tear of several years of service, and also to withstand this under the most adverse climate conditions, such as along the Atlantic Seaboard or Gulf States where salt spray might affect it.

For that reason we very jealously guard the quality of this material, and constantly check it and test it to make sure that we are not going to have defects develop out in the field and consequent service problems and damage to our reputation.

Q. You have referred to service problems, Mr. Norberg. To what extent, if any, has the service that du Pont Company offers been a factor in your decision to continue to purchase your requirements of the synthetic enamel from du Pont?

A. I would say that in addition to the very fine inherent qualities of the material as we know them, and also the fine association we have had with du Pont for all these years, that one of the next items in importance and in favor of our continuing with du Pont is the fact that they do have an excellent technical service that they offer us constantly, which consists of not only sending technical service people into our plant, but also making available to us their laboratories where we can send our people or send panels in to keep a constant check on the quality of the material as we receive it and also the way we put it on.

One example of that it perhaps might be well to mention. A few years ago we received some complaints from—I believe this was one of our foreign sales outlets in Africa—where because of certain defects in the finish, rusting and blistering occurred.

[fol. 4924]. We called in and asked the du Pont people about it, and as a result they sent in several technical people, kept them in our plant for a long period of time to run down the cause of the trouble, and at the same time ran tests on our material in their laboratory to try to find the answer.

Eventually it proved to be not the finish at all, but the metal preparation that precedes the finishing operation.

I offer that as one example of the technical service that is always available to us.

Q. Other than the quality of the product and the technical service, are there any other factors that have entered into your decision to continue to purchase your synthetic enamel from du Pont?

A. Yes. I believe one other advantage of our association with du Pont or anyone's association with du Pont on finishes is the series of meetings that du Pont has sponsored. Many of these meetings took place before the war, and since the war there have been several of them.

These meetings are sponsored for du Pont customers. At that time the technical people from the du Pont laboratories reviewed recent developments in their laboratories on new and better finishes for their various customers. It usually consists of not only presentation by the du Pont technical people, but a discussion by the customers as to whether they do or do not feel that this particular finish that is being developed is going to apply to their product, how much they think it might be worth to them, and in general it is a very educational thing for the customer.

They also go into new techniques of spraying the paint, metal preparation, a number of other factors that are very helpful to a company in our kind of business.

Q. Do you know of any other finish manufacturer that [fol. 4925] sponsors such meetings?

A. No, I do not. I don't believe that any of them do.

Q. Returning now to the question of your testing of other synthetic enamels, I believe you mentioned that you have tested and run trials on Jones Dabney. Have you tested other synthetic enamels?

A. Yes, we have. I believe that we have tested Jones Dabney, Sherwin-Williams, Cook Paint and Varnish, and Pittsburgh Plate Glass Company's paint.

Q. Have you tested them only in the laboratory or on trials?

A. No, those tests are not only laboratory tests, but they are also field tests in which we send complete products out into the field in various controlled or observed areas.

Q. Have you approved as a source of supply any of these materials?

A. Yes, we have. We have approved Jones Dabney as an alternate or second source of supply for our standard refrigerator whites.

Q. But you have continued to buy your enamels 100 per cent from du Pont?

A. That is correct, with the exception of the trial runs that I mentioned a moment ago.

Q. Mr. Norberg, will you direct your attention now to the interior or the food compartment of the refrigerator?

What finish does Crosley use on the food compartments of its refrigerators?

A. Porcelain enamel.

Q. Has it ever considered using "Dulux" in the food compartments?

A. Yes, we have. We have considered it many times, even before the war.

Q. Has du Pont ever attempted to persuade Crosley to use "Dulux" to finish the food compartments?

A. Yes, they have, in a very emphatic manner. I remember very distinctly. I think it was about 1948, Bill Kreuer, the du Pont representative, came into my office. He had a whole carload of equipment with him, and put on a very convincing, dramatic demonstration of why this particular new finish that had been developed was better than porcelain enamel for refrigerator food liners or interiors.

Q. Did you use or did you test "Dulux" for use on food compartments?

A. Yes, we did. We not only did some testing after that demonstration, but we had done quite a lot of it before, and I believe that even prior to Mr. Kreuer's demonstration we had already built between 500 and 600 refrigerators in which we did have these "Dulux" interiors, placed them out on test in various parts of the country, and kept them under observation there. They are actually still there.

Q. Have you reached any conclusions from the observations you have made on the "Dulux" finish on food compartments?

A. Yes, we have. We feel that it is a satisfactory method of finishing the interior of a refrigerator.

Q. Entirely durable and commercially satisfactory?

A. Our tests indicate that, yes.

Q. Is there any advantage to be gained in your opinion from the use of "Dulux" rather than porcelain in the food compartments?

A. The advantage primarily is one of cost. We estimate that there might be a reduction in product cost of somewhere in the neighborhood of \$1.00 per refrigerator by using the "Dulux" enamel rather than the porcelain enamel.

[fol. 4927] Q. In view of your conclusions as to the durability of the "Dulux" for food compartments and the saving in cost, have you decided to use "Dulux" on your interiors?

A. No, we have not.

Q. You have continued to finish them in porcelain?

A. We continue to finish them in porcelain, that is correct.

Q. Why is that?

A. Primarily because of the fact that we are in a highly competitive business, and our products must be sold along side of our big competitors in the business, Frigidaire, General Electric, and a number of other companies.

Were we to come out with a synthetic enamel or "Dulux" liner in our refrigerators, as compared with the porcelain interiors in the others, they might throw rocks at us, and our customers and prospective customers would be given the story undoubtedly that our product was an inferior one. That doesn't necessarily mean that it is, but that might happen.

Q. Did you ever advise the du Pont salesman as to why Crosley was not using and would not use "Dulux" for the food compartments?

A. Yes, we did. We repeatedly have told du Pont representatives who call on us that if they could convince or sell Frigidaire, General Electric, some or all of the big companies, to convert over to synthetic enamel or "Dulux", that we would be very happy to go along, but we couldn't do it under the circumstances of their continuing with porcelain enamel interiors.

Q. Does Crosley finish the exteriors of any of its refrigerators with porcelain?

A. No, we do not.

Q. What is the reason for that?

A. I might say that we are not particularly interested in [fol. 4928] building that kind of a refrigerator. We see no particular reason for it, and it does amount to a very, very

small segment of the potential business, of the overall business that we enjoy.

Q. Did you ever finish the exterior of any of your refrigerators with porcelain?

A. No.

Q. Does Crosley have its own porcelain making and applying facilities?

A. Yes, we do.

Q. Do you know the approximate capital investment that Crosley has tied up in such facilities?

A. I would guess somewhere in the neighborhood of four or five hundred thousand dollars, somewhere near a half a million.

Q. Is that referring only to the facilities at your refrigerator plant?

A. Yes, that is right. That is correct.

In addition to that, we do have facilities in our Nashville, Tennessee, plant which are not used on refrigerators at the present time. They are used on the parts for ranges.

Q. Are the Crosley refrigerators distributed throughout the United States?

A. Yes, throughout the United States, and many foreign countries as well.

Q. Mr. Norberg, let me direct your attention to the question of the refrigerant used by Crosley.

First, let me ask you, do your duties as the Engineering Director carry with it responsibility with respect to the refrigerant used in your machines?

A. Yes, that is right.

Q. What refrigerant does Crosley use in its household refrigerators?

A. We use Freon-12, commonly known as F-12.

Q. When did you use F-12?

A. 1936.

Q. Has Crosley used it continuously since 1936?

A. Yes, sir, that is right.

[fol. 4929] Q. Have you ever heard of a refrigerant called F-114?

A. Yes.

Q. Did Crosley ever attempt to buy or to use F-114?

A. No, we never did. We never had any occasion to. F-114, as I know it,—I am not too familiar with it because we have no use for it—it was a refrigerant designed or formulated by Frigidaire for their rotary compressor.

We have never used a rotary compressor, and therefore had no reason to want any quantities of F-114.

Q. What type of compressor do you use?

A. We use a reciprocating compressor.

Q. Do you know of any refrigerator company besides Frigidaire that did use the rotating type of compressor?

A. Yes, I know two. Norge, made by Borg-Warner, and Seeger makes the Sunbeam refrigerator.

Mr. Gribbon: You may cross examine.

Mr. Harris: Just a few questions, Mr. Norberg.

Cross Examination.

By Mr. Harris:

Q. How long have you been in the refrigerator business?

A. Since 1932.

Q. So that you have been with your company during all the time that it has been selling refrigerators, have you?

A. No, I have been with my present company, the Crosley Division, only since 1941.

Q. You were in refrigeration before that?

A. Yes, that is correct.

Q. Who were you with?

A. Just prior to coming with Crosley, I was with the [fol. 4930] Gibson Refrigerator Company at Greenville, Michigan, for two years, and then from 1932 until 1939 with the Norge Division of Borg-Warner.

Q. Does the Norge use porcelain for its food compartments?

A. Prior to the war, Norge did use porcelain.

Q. Now, your people—when did they first use "Dulux" on the exterior? That is where they use it, isn't it?

A. Yes, that is correct.

Q. Did they use it right from the start?

A. Yes, 1935.

Q. They used porcelain for their food compartments, is that correct?

A. That is right.

Q. What other claims are made, do you know, for porcelain, as a substance for food compartments?

A. Probably the most important one is it is clean and sanitary, and it is a carryover from the early days when the insides of refrigerators were packed with a heavy slab, almost a sort of marble type of thing. Of course—

Q. The properties of porcelain for food containers has been broadly advertised, have they not?

A. That is right.

Q. Are we right in saying it is practically universal among all refrigerator companies that they use porcelain for the food compartments?

A. Of the leading companies, yes.

Mr. Harris: Thank you.

Mr. Gribbon: You may be excused.

(Witness excused.)

Mr. Cox: I will call Mr. VanDerau.

[fol. 4931] C. L. VANDEAU, called as a witness on behalf of the defendants, having been first duly sworn, was examined and testified as follows:

Direct Examination.

By Mr. Cox:

Q. You are C. L. VanDerau?

A. Yes, sir.

Q. Where do you live, Mr. VanDerau?

A. Mansfield, Ohio.

Q. What is your occupation?

A. General works manager, Mansfield, Newark and Columbus plants of the Westinghouse Appliance Division.

Q. Is that a part of the Westinghouse Company?

A. Yes, sir.

Q. How long have you held that position?

A. Two years this coming September.

Q. Did you work for the Westinghouse Company before that?

A. I worked for the Westinghouse Company since 1922.

Q. Will you tell us very generally what the nature of your duties has been with the company since, say, 1930?

A. Since 1930?

Q. Yes.

A. Well, I was general superintendent, was made general superintendent of the plant in 1927; works manager of the plant May, 1935, and general works manager of the three plants September 1st, 1951.

Q. Does the Westinghouse Company manufacture home refrigerators?

A. They do.

Q. Does the manufacture of these refrigerators come within your jurisdiction?

A. It does.

[fol. 4932] Q. Do you have anything to do with selecting the finishes that are used on refrigerators?

A. Quite a lot.

Q. What do you do about the finishes, Mr. VanDerau? What are your duties with respect to finishes?

A. Well, the general management, and under the general management, the finish is a very important thing in the refrigerator field; in the early days of refrigeration, there had been a great many hundreds of thousands of dollars lost because of imperfect finish due to the metal treating processes, and superior finishes have been developed by the refrigerating companies.

Q. At the present time does the du Pont Company sell any finishes to Westinghouse for use on refrigerators?

A. They sell all of our material for refrigerators.

Q. What kind of material is that, Mr. VanDerau?

A. Well, that is a synthetic primer and a synthetic finish coat.

Q. Those finishes are sold generally under the name of "Dulux", is that right?

A. Yes, sir.

Q. How long has the du Pont Company been supplying 100 per cent of your requirements of those finishes for refrigeration?

A. Since January 1, 1932.

Q. When did you begin to use synthetic enamel as a finish for your refrigerators?

A. The latter part of December, 1933.

Q. What I am trying to find out is whether at any time since you have been using synthetic enamel for the exterior finish of your refrigerators, you have bought it from anyone other than the du Pont Company?

A. No, with the exception of trial runs, samples, we might take through the laboratory testing phase.

[fol. 4933] Q. When you first began to use "Dulux" as an exterior finish for your refrigerators, do you know what other manufacturers were using it as a finish at that time?

A. General Electric at Erie.

Q. Was using what?

A. Synthetic finishes from du Pont.

Q. Prior to that time, how had refrigerators, generally speaking, been finished?

A. With oil primers, high heat oil primers and cellulose lacquers, one primer coat and two so-called lacquer or "Duco" coats.

Q. Do you know whether Frigidaire was using "Dulux" when you first adopted "Dulux" as a finish?

A. As far as I know, they were setting up to use "Dulux", and came in shortly after we got it.

Q. Why did you change from "Duco" type of finish to "Dulux" when you did change?

A. Because "Dulux" type of material was far superior by every test we could put them through. The weakness of your "Duco" principally in white, is that they turn yellow, almost over into light brown as they age, and they become harder as they become older, and very much subject to chipping, and anybody passing by a refrigerator with some object, and strikes a door, you have knocked a chip off.

Your "Dulux" material is very much like rubber, and will stand a lot of abuse, and does not become hard and brittle with age. The best comparison would be to take a sheet of new celluloid, very flexible, and then six months later, as the gums come out, you could snap it any place.

That is the difference between "Duco" and "Dulux" finishes. [fol. 4934] Q. Do you know whether the adoption of "Dulux" has resulted in any savings in cost at Westinghouse?

A. There has been a spectacular savings. The box figures about 100 square feet of surface, and "Duco" finishes, in 1932 and 1933, averaged \$3.90 for 100 square feet. Those figures have been brought down to as low as \$1.15 per hundred square feet per cabinet, and at the present time, with the increases that are taking place in the basic raw materials since the war, it has run to \$1.60, and you have a much superior finish. Instead of yellowing, your "Dulux" bleaches whiter.

There is another factor. At one time, we spent a tremendous amount of money for damages in shipment. They were taken out of the crate by the dealer, and delivered to the customer, and the damages on the "Duco" finish, as distinguished from "Dulux," averaged 12 cents a cabinet. What I mean by that, if you have 100,000 cabinets, you have a liability, in which you set up a fund to take care of it.

You must remember these cabinets are guaranteed for five years, and this has been a progressive thing over the years. It is .81 of a cent as against 12 cents in the early days of "Dulux."

Q. Mr. VanDerau, does anyone other than du Pont Company make a synthetic enamel of the same general type as "Dulux"?

A. There are several companies today.

Q. Have you ever tested any of the synthetic enamels, made by those other companies?

A. Only small tests of samples, and compare it in laboratories. We have never obtained materials and actually put runs on them out in the field. Whereas we have done that with "Duco" or "Dulux" material.

[fol. 4935] Now, there is a very good reason for it, and it is an economical reason. Remember that household appliances are tremendously competitive, and one of the things you have to resort to is mass production tactics or methods. When you do that, you cannot be changing these materials.

These products are standardized, the labor operations and packing time in minutes and seconds.

As just a little sidelight, four hours and fifty-five minutes from the time we stamp a sheet of steel for the body, through over 1300 individual operations, it is in the warehouse ready to ship, at the rate of two a minute.

So you see that any materials, basic materials, finishing materials or things of that kind, must be standardized, and back of that is the scientific control, such as metallurgical and chemical controls, especially at the sources of the raw materials, and at the point where you put those materials in.

Now, the figures I gave you indicate that several things have happened. One is that du Pont has improved their products, and simplified them.

The other is that we must have done something, too, to obtain these spectacular results, as far as costs were concerned.

Now, back in 1935, we started to experiment with reclaiming sludge in the tanks. That meant an investment of over \$100,000.00 in trying to save this wasted material.

There were reasons for that. The city dump did not want to take this material, and we had a problem of how to get rid of this sticky substance. Nobody was using it.

In spraying materials, you only use about 35 percent of [fol. 4336] the material on the product. The other is oversprayed and volatile, and goes out in the stacks. We set up a small paint factory under laboratory control, and being managed by a chemist who knew what they were working with and working for, over a period of several years.

First we made a factory paint. Then we made a paint we could use on a compressor, then we developed it for water tank, but over a period of approximately five years, and working with du Pont, and du Pont, instead of resisting, (it lost business for them) helped us and also became a source of supply of the raw "Dulux."

We found that we could take a picture of the new "Dulux" and add 25 to 30 percent, and as high as 35.

However, we do not recommend that, between 25 and 30, and fed it back into the product with the proper kind of control.

Now, I point out as an economical problem in which our cost for the small paint factory through 1951, to use the two years figures in the 1951, the savings and profit over and above the cost of the raw materials, and labor to reclaim these things amounted to \$452,000.00.

Q. You are speaking of the saving from this reclamation?

A. That is right.

Then, in 1952, a lesser amount of production, due to the unavailability of raw materials, such as steel, copper and aluminum, there was a lesser production, but the savings were a little over \$431,000.

Now, if we take these economic reasons into account, it ought to be easy to see why we have no desire to be constantly changing from one standard to another, because we would have to go through all this problem again.

[fol. 4937] There is nobody, so far, that will come up with prices that will take out that much of our costs, and that amounts to quite a little amount of money, where it is a little better than \$2.00 a refrigerator.

Q. Would the use of finishes from two sources of supply in any way complicate this reclamation process?

A. Yes, because if you take a white—first, you could have a blue white from one supplier, and we will say, and a cream or slightly yellow white from the other, and you will not get a product that you can blend into the other because you have lost your standardization, your specialization.

The Court: The Court will now recess for fifteen minutes.

(Whereupon a recess was taken.)

By Mr. Cox:

Q. Mr. VanDerau, over the years have any other manufacturers of high-baked whites solicited Westinghouse for its business for refrigerators?

A. Quite a number of times.

Q. Now, will you tell us, in addition to the reasons you have already given, why you have not, or have you changed your sources of supply for this material, or adopted a second source of supply?

A. Well, one of the reasons is that with a conveyorized plant you cannot be subject to the whims and wishes of

everybody else. After you adopt a course, you have to follow that.

Now, these mixing tanks hold about 500 gallons. They are rated at that, but they actually have about 450 gallons in them, and there are two of them to a set-up, two each for the primer, and two for the others, and your reclaim.

[fol. 4938] And when you have about a mile of pipe lines that run to these spray booths—why, it would take at least a day to drain the lines out, and you would have \$2,000 worth of material that you would have to use inefficiently, and the chances are that you would turn out some bad products because you have got off base with it, with your air pressures and your temperatures, and it is not just an easy job like a change-over, so you see that is another reason why we'd resist doing that.

And I might say that we do use some other materials on other products, and we apply exactly the same kind of methods of control to those products that we do to du Pont.

Q. Directing your attention to the refrigerator finish again, does the quality of the du Pont products have anything to do with your decision not to get a second source of supply, or change your source of supply?

A. Very definitely. When we first went in, when "Dulux" was first introduced to us by du Pont personnel, I made a trip down to Philadelphia to look at their pilot plant, and I sort of put an estimate on what du Pont had put into that plant, and the confidence they had in the "Dulux" materials, and I had an estimate in my own mind of about \$2,000,000, plus a tremendous lot of money in tens of thousands of panels that they had in their laboratories developing these synthetics as well as in their Florida proving grounds, and places of that kind.

So when you see those kinds of methods in use, see technically trained personnel running those, you cannot help but have confidence in that, and for that reason, my associates have to report back, and we agreed to plunge in and work [fol. 4939] along with du Pont. We have had a very, very happy relationship over those years.

Now, another factor—and I think I can say this without it being harmful to any other suppliers—du Pont has the finest trained technical group at their beck and call, at the beck and call of the users of the materials, of anybody in the

business and we have had several times, when we have had a little problem, and I am thinking of one in particular where we were going to find it very difficult to keep in production until the trouble would be overcome, which I called from Pittsburgh to the Chicago office, and the next morning one of the men of du Pont was on the job, and within a very few hours they had materials coming in from their Toledo plant that kept us in production.

You cannot laugh off that kind of service. They have been simply excellent, and I don't know how you could say any better.

You can be sure with du Pont, on that kind of service.

Q. Does this technical staff of which you speak provide service regularly? Do they make regular calls on your plant?

A. Their salesman—I wouldn't exactly call them a salesman—they seem to be more of a sales engineer and actually they are in our plant for a day and a half every week, looking after our needs, and if there is indication of any trouble, our people feel very free with them, and they do everything possible to keep us out of trouble.

For instance, I know a little illustration, a little off color in the toning of colors that you use in your re-lain. Du Pont sent three people in and left one of them there for about two weeks working with our mechanical people until they found out what the trouble was with that particular power. [fol. 4940]. Q. In general in purchasing the material, including the finishes that you use on your refrigerators, is it the practice on the part of the Westinghouse operation with which you are familiar to change suppliers from time to time depending upon the price they offer you?

A. No.

Q. Why is that?

A. Well, of course, that is a little difficult to answer. There may be exceptions to that rule. But these large mass production plants do not lend themselves to changing because they are too costly. If there is any merit to a product, we will prove them in a laboratory in a small way rather than plunge production.

Sometimes when a pint of material will do what a ten barrel lot will do, it requires a laboratory test to determine, and a lot of people are not interested in purchasing that pint.

Q. Do you purchase finishes on the basis of price or quality or service or on the basis of all three?

A. Well, I would say on the basis of all three. Actually in the years that we have used the du Pont materials, I don't know of a single time that we have tried to chisel on the price.

We have found in our association with du Pont that as their basic raw materials have gone down, they have notified us that there would be a reduction of ten cents or twenty cents a gallon; and by the same token they have raised their prices when their basic raw materials have gone up. So it has been a rather mutual thing.

Our purchasing people haven't got the slightest idea of trying to chisel du Pont after these many years of association.

Q. Has there ever been a time to your knowledge when you or your purchasing people have felt that the prices charged by du Pont for the "Dulux" finish were unreasonable? [q. 4941]

A. No, and the reason for that is possibly our own control, in which we have a standard set of so much material cost per square foot. There is a monthly statement put out on that, and if there is a tendency for that to go up, it doesn't necessarily mean that du Pont's price is out of line. It can mean that there have been ten more pounds of pressure added, it means that much more waste.

So through that standardization and the figures I gave you a few minutes ago, we don't think—we insist on a good product and reliable product for which we are willing to pay, and the other savings are in the application of it, in other words, trying to do it in a scientific way day after day the same way.

Q. I should like to turn briefly, Mr. VanDerau, to another subject and ask you this question:

Does Westinghouse now finish the exteriors of any of its refrigerators with porcelain?

A. No, we haven't finished any since the war.

Q. Did you finish the exteriors of any of your refrigerators with porcelain before the war?

A. We ran never over six per cent of our total production, and that was primarily for the Gulf Coast and certain river towns. There is a differential in cost to the customer. It means an extra investment—I am talking old prices now—

of about \$25.00 or \$30.00. It takes special steel, and there are a lot of things in there that are different than the "Dulux" finishes.

Q. You say since the war you have finished no refrigerators with exteriors of porcelain?

A. We tore that setup out during the war for war products, and we never replaced it.

[fol. 4942] Q. Since the war have you sold your refrigerators in the Gulf States and in these river towns that you mentioned?

A. We have.

Q. Have you had many complaints about the finish from those areas?

A. Practically none.

Q. Do you know to what extent the porcelain is used as an exterior finish in the refrigerator industry today or since the war?

A. Well, that is a difficult question to answer. Taking all the refrigerator companies that are in the business, Frigidaire is about the only one that still furnishes a porcelain refrigerator.

In their standard lines, I would take an average and say it wouldn't amount to two per cent, and maybe less, in the industry. I don't think it has ever amounted to over ten per cent of Frigidaire's sales.

Q. Do you know of any other company since the war that has used porcelain as an exterior finish for refrigerators except Frigidaire?

A. I do not. I just had a conversation that runs through my mind. I think Kelvinator made a small lot right after the war, and then went out of the business. I could be wrong. That could be just before or after.

Q. Does your company have any porcelain making and porcelain applying facilities?

A. We have one of the largest enameling plants in the country, second to Frigidaire, who has the largest. It is used on our other products.

Q. Could you tell us in general terms how much capital investment is represented in those facilities, if you know?

A. Well, that is a little difficult. I would say, without the building, and on today's prices, that those four furnaces

[fol. 4943] with the full complement of equipment and the necessary miles of conveyors that are involved, it would be somewhere between one and three-quarters to two million dollars.

Now the "Dulux" facilities, they run somewhere in the neighborhood of a half a million. That is not floor space. That is strictly facilities.

Mr. Cox: I think that is all. You may examine.

Cross-examination.

By Mr. Houchins:

Q. Mr. VanDerau, when did Westinghouse start making household refrigerators?

A. We made units in 1929, and bought our cabinets from Kelvinator, Frigidaire, and Seeger.

Q. When did you start making your own?

A. We started making our cabinets as of January 1st, 1932.

Q. In 1932, what percentage of your cabinets were porcelain and what percentage were "Duco"?

A. All "Duco." There was no porcelain at that time.

Q. That is, Westinghouse has never made a porcelain cabinet, is that correct?

A. Oh, yes.

Q. When did you start making porcelain cabinets?

A. We started making porcelain cabinets in the fall of 1933.

Q. Let's take the year 1934, shortly after you got in production on porcelain cabinets. Can you give us an estimate as to what percentage of your cabinets manufactured were porcelain cabinets?

A. Never over 6 per cent.

Q. Sixty?

A. Six. That was the high water mark. It could be anything from that down to zero.

Q. I am not sure that I understood your answer a moment ago when Mr. Cox asked you if you had porcelain enamel

[fol. 4944] equipment, and I think you said you had the equipment but for other purposes. Is that what you said?

A. I said used on other products as well as being used on the food liners for the refrigerators.

Q. Do you have porcelain enameling equipment which is used on the exteriors of refrigerators?

A. No.

Q. Of that porcelain enameling equipment which you do have, is there any way that you can distinguish between that which is used on food compartments and that which is used on other appliances generally?

A. That is a very easy thing to answer. Yes, because there are two separate enamel plants.

Q. You have one plant that is used only—

A. One for the food liners and the tubs for the Laundromats. They are highly specialized. The other enamel paint—that is a pair of furnaces in both cases—is for the exterior parts, such as ranges, tops for water tanks, hot plates, roasters, and a million and one other things of that kind. That is what we call the exterior.

Q. You say you have one plant for food liners. Do you mean by that food compartments in refrigerators?

A. That is right.

Q. Can you give us an estimate of what that plant represents in capital investment?

A. One and three-quarter million dollars. They are dead duplicates of one another.

Q. Mr. VanDerau, were you ever known in the industry or among refrigerator men as a pro-porcelain man, a man who favored porcelain over "Dulux" or any other type of exterior finish?

A. Not for refrigerators.

Q. You distinguish, apparently. What do you mean, for what?

A. Ranges.

[fol. 4945] Q. Have you always felt porcelain was not as good a finish for the exterior of refrigerators as other products, for example, "Dulux"?

A. No, I don't think it is a question of that. It is one of economics. It is one of anywhere from \$25.00 to \$35.00 premium.

Q. I am talking now about the exterior finish.

A. I am talking about the same thing. There are many reasons.

For instance, you don't have the basic supply of enameling iron to furnish that requirement in any great percentage, and we haven't had it since the war.

Q. Turning our attention now, a moment, to the food compartments, what has been your feeling on food compartments? Have you felt that porcelain is a superior product for food compartments?

A. Well, you see refrigerators, due to tradition and convention all down the line, started off with the porcelain food liners. There have been a tremendous lot of sales talks that have built that up, and when you get through with it, it is a superior finish for certain things, like we will say citric acid, acetic acids, things of that kind that you get in foods.

It is more costly, but one of the factors that make you form an opinion is what is the industry doing? The industry has been practically all porcelain.

Now, these salesmen go into a large department store, and here is every make over there, and our sales depend pretty much on the attitude of the floor salesman. He says this is porcelain, porcelain glass. This one over here is plain paint. We would lose sale after sale unless a high percentage of competition would go in and do exactly the same thing.

In 1936 we put out 10,000 boxes with the "Dulux" liners. [fol. 49-46] It was a sizable cost reduction, at that time more than a dollar a unit.

Our sales people said we can get \$5.00 more if you will put the porcelain back on because our competitive sales people are going into the show rooms, taking a half dollar, which is a little rough on the outside of the edge, and going across and scraping through it, which you can't do with glass.

It is pretty hard to beat that kind of sales. You couldn't put your finger on any one individual because it could be that salesmen working for a particular store over here that

does that. It doesn't necessarily mean it is Frigidaire, General Electric, or anybody like that.

So we had that resistance there. They have been out seventeen years, and we have never made a single repair part for them, so they couldn't have chewed up too many of them.

You bring this up, we are turning out "Dulux" liners at the present time for certain applications.

For instance, we have been making a freezer, six cubic foot size, at our Springfield, Massachusetts, plant, and a little four foot refrigerator. They do not have porcelain facilities at Springfield, so the total production will run somewhere between 100 and 150 a day, and have been for the last four or five years. Those are "Dulux" liners.

We have an eighteen foot size made up here in Wisconsin, that is beyond our oven facilities; light production of something like fifty of those big fellows a day.

They don't have enamel facilities, so that is a "Dulux" finish job, and that is being done today.

We have no complaints on those products.

But there is no similarity between the types of equipment [fol. 4947] that you put in for "Dulux" as against the type equipment for porcelain.

So, if you have your investment in your porcelain facilities, and with a certain amount of sales resistance, you would not change that finish.

Then there is another thing that you have to take into account. Since the war, the buying public has been buying the better things. You can take automobiles, or you can take refrigerators or ranges and they want all the frills, clocks, cigarette lighters, everything you can think of, and that puts you up in the high price bracket. That is one phase.

The other phase is that instead of buying five cubic foot, six cubic foot, they now buy eights, tens, and twelves, and even up to eighteens. They are not buying the \$100.00 box.

So, don't you see, the demand is for a higher cost box because we had not been in a highly competitive market that we may get into, that may force all of us to get in to pick up that dollar or more that can be taken out of a food liner.

Q. You mentioned a moment ago that once the manufacturer has a plant facility for the production of porcelain refrigerators, that is, refrigerators covered with porcelain, that he is reluctant to change. Is that what you stated a moment ago?

A. That is right, because what you do is take a tremendously high priced investment, leave it lay there idle, and put in a second big investment. The savings that might be apparent piece by piece may not be so apparent when you have these idle facilities on your hands.

Mr. Houchins: If the Court please, I would like to introduce in evidence at this time, what has been marked Gov-[fol. 4948] ernment's Trial Exhibit No. 1324. It is No. 3 list, document No. 50, supplied to us by counsel for du Pont.

(Document, so offered and received in evidence, was marked Government's Exhibit No. 1324.)

By Mr. Houchins:

Q. This appears to be a letter on the stationery of the du Pont Company from John W. Stutt to Mr. Henry E. Lackey.

Will you tell us who Mr. Lackey was, please?

Mr. Cox: I will stipulate to those facts. I don't think you ought to ask the witness that question.

Mr. Lackey at that time was industrial sales manager in the fabrics and finishes division, the finishes department of the du Pont Company.

Mr. Houchins: Will you please inform us, Mr. Cox, who Mr. Stutt was?

Mr. Cox: My recollection, which I shall check at some time, was that Mr. Stutt was the regional sales manager in Philadelphia of the finishes division of the fabrics and finishes department of the du Pont Company.

By Mr. Houchins:

Q. Does that accord to your recollection?

Mr. Cox: I object to him asking this witness about this document, which he has never seen before, and the document with which he is not connected.

[fol. 4949] Mr. Houchins: This document is written by Mr.

John W. Stutt, and if counsel will check the document, you will see that he refers to a recent conversation, or various contacts he has had with this witness. He writes about this witness, describing certain things about the witness.

I think it is very probable that this witness knows who Mr. Stutt is.

Mr. Cox: If the witness can answer.

The Court: He may answer that.

The Witness: A. I do.

By Mr. Houchins:

Q. Will you identify for us, please, Mr. Stutt?

A. He is regional manager in the Philadelphia office in the Finish Division of du Pont, and has been for a great many years.

Mr. Houchins: I read from that document, the first and second paragraphs. The document is dated June 28, 1949:

"I understand that the publicity campaign by Frigidaire, featuring Porcelain finish inside and out on their refrigerators, is quite familiar to everybody in Wilmington, but I am attaching copy of the ad anyhow for its informative value.

"This brings back quite some interesting memories to you and myself because it portrays to my mind the dramatic episode at Parlin when Mr. Moosmann advised us some twenty years ago that we had lost our last DUCO (Frigidaire) account due to the fact that they had spent over \$1,000,000 in putting in their own Porcelain enameling equipment."

[fol. 4950] Continuing on with the third paragraph, in order to substantiate the statement I made a moment ago:

"We all realize that these things do not happen all of a sudden; that Frigidaire must have been considering this major step for a number of years. Also none of us can overlook the fact that C. L. VanDeraar, Manager of Westinghouse Elec. & Mfg. Company at Mansfield is and always has been pro-porcelain in his thinking and it was always considered absolutely necessary by me to develop on an annual basis evaluation ratings

to convince Van and Frigidaire that DULUX offered superior advantages over Porcelain."

Mr. Cox: Are you going to ask a question about the document?

Mr. Houchins: No.

Mr. Cox: Thank you.

By Mr. Houchins:

Q. Mr. VanDerau, is there on the market a satisfactory substitute or competing product, I should say competing product for "Dulux," that is, a satisfactory synthetic enamel?

A. I think there is.

Q. Would you name for us, please, those that you know?

A. I think Pittsburgh Plate Glass has a satisfactory product. I think possibly—I have had very little experience with Jones-Dabney, but I know it is used by some of our competitors. I think there are two or three.

But in spite of that, you cannot be mixing up suppliers [fol. 4951] and get the values back in supplies that we have attained, and also keep our field reputation at a very high level which we have obtained from a company which we have the full history on.

Q. Have you tested any of these products?

A. Yes, not necessarily on refrigerators but on other products.

Q. Have you tested any of them on refrigerators?

A. No, only through the laboratory stage of a few panels.

Q. By that you mean test runs?

A. No, not test runs. A test run would be where you take a hundred refrigerators or a thousand, run them and put them out in the field for a year. We would take panels and things of that kind and make comparative checks.

Q. This was only a laboratory test?

A. That is right.

You see in the control of these things, we have a 60-day coat test, in 100 degree temperature in which we take two panels out of production a day, and put in there. We also take two panels and put them in the humidity of 100 degrees, and 100 percent relative humidity.

Now, if there is anything defective, it will start little blisters, and these little blisters in the coat will develop into rust and shelve that finish. So this thing has been reduced to a science, so you see, you can take a pint of materials and put them in the 60-day test and find out you have been very, very foolish to spend good money running a test run-off.

So there are a lot of things like that we do that we can predetermine pretty well.

[fol. 4952] Q. I refer now to Defendants' Trial Exhibit No. DP. 349, which has been introduced in evidence in this case.

This appears to be, Mr. VanDerau, a report of a meeting held at the Bismarck Hotel in Chicago on November 10, 1944, by the Industrial Finishes Division of du Pont.

I gather from the context of the report that you were at that meeting. Do you recall that meeting?

A. Well, I have been at several of those meetings, but I don't know which one this would be, unless it is identified to a time.

Q. What is that? I didn't get it.

A. I say unless it was identified by time.

Q. If you look on the front, sir, you will see that it is November 10, 1944.

A. I was at that meeting.

Q. I see your name is referred to on the second and third pages of the document.

I gather generally, Mr. VanDerau, at that meeting a discussion came up concerning the comparative price of porcelain on the food compartment of refrigerators, compared to "Dulux." Do you recall that?

A. Yes, I do.

Q. What position did you take as to that issue? Did you argue that porcelain was cheaper or more expensive than "Dulux"?

A. No, I argued that porcelain was more expensive, and these figures here indicate that, because there are figures mentioned anywhere from 50 cents to \$2.50, but the conditions of 1944 as against the conditions of 1953, those figures would change.

I would like to say at this time that if you were putting in new equipment you would hesitate to jump in either [fol. 4953] direction, because you have the future of plastics down the road, and maybe it would mean a difference of \$5.00 a food liner, so the manufacturer would hesitate very much before he would do that and stay pretty much with what he had.

Q. Starting at the top of the third page, Mr. VanDerau, I read:

"A calculated saving of 50¢ to \$2.50 per cabinet, depending upon porcelain costs in various plants, will accrue with the use of 'Dulux.' Mr. VanDerau stated that the savings would be even higher than estimated by many because the baking of 'Dulux' will not distort the liner as in the case of porcelain, which would eliminate the cost of hand fitting of shelf slides with shims. He contends 'Dulux' is a 'natural' for the job.

"Mr. Sosey of Seeger claims that very little would be saved by using 'Dulux' in place of porcelain on the interior of home and farm freezers. Mr. VanDerau took firm exception to Mr. Sosey's statement on the basis that the dimensional variation with porcelain coated liners would create an untenable labor cost in the alignment of various compartments and the slides for shelves and baskets."

Now, having refreshed your memory, Mr. VanDerau, by reading that document, do you recall whether or not you took the position it would be cheaper to use "Dulux" than it would to use porcelain?

A. It would have been cheaper to use "Dulux" at that [fol. 4954] time, and it would be cheaper now if you had the proper facilities, but the dollar values have changed, and the reason is that you have gas welding flow—some manufacturers use that. Then they took another step, from three rollers to two rollers, to turn it, to get the linings.

Now, those welders have been changed over to six welders where they come in, and the three operations become one.

So some of these savings apparently since 1944 have been decreased to a figure that I would put of \$1.00 to \$1.25, as against that \$2.50.

Now, in changing all that, the necessity for fitting where a set of racks approximated a dollar a cabinet, that has already been eliminated through other mechanical controls, and through more improved equipment.

The problem between "Dulux" and porcelain is strictly mechanical. Your glass at 1550 degrees of temperature, the grain structure changes, and the food compartment wants to belly out like a barrel, whereas "Dulux" at a temperature of not over 375 degrees in the primer, you do not get the warping of steel that you have to push back in shape.

So, as your heavier equipment, you would put more reinforcing in this way of reinforced angles, and take, for instance, you put a "T" in there and stretch that metal out a [fol. 4955] little bit, it will take out a lot of the warping if your design will permit it.

So, everybody has been working on this, and there is still a possibility of \$1.00 more, but not \$2.50, with the improvements that have been made.

Q. I have just a couple of other questions, and we will be finished there.

Do you recall whether or not a Frigidaire representative was present at this meeting at the Bismarck? Do you recall anyone there representing Frigidaire?

A. I think Frigidaire had a representative there, but again, I wouldn't want to be held to that. There was a roster signed by everybody and ought to be in the du Pont records.

Q. Now, one last question: Has Westinghouse ever used "Dulux" on its food compartments?

A. Ten thousand were turned out in 1936 which I referred to a few minutes ago. At the present time we are making a freezer and an under-the-sink type at Springfield, Massachusetts, in "Dulux", and we are making our 18-foot cabinet at Manitowoc in Wisconsin, at the rate of about fifty a day in "Dulux."

Now, all the balance of them are made at Mansfield and are in porcelain, and we couldn't put them in "Dulux" if we wanted to, because our "Dulux" facilities are way overloaded.

We would have to go out and provide a whole bank of new facilities in order to swing that job over, because this

business has grown to where we have no excess capacity.
[fols. 4956-4957] Mr. Houchins: There are no further questions.

[fol. 4958] The Court: You may proceed.

Mr. Ragland: The black book that the Clerk has, marked Ernest R. Bridgwater, that I will ask him to hand to you, your Honor, contains the nine exhibits that we will introduce in examination of this witness.

The purpose of the testimony of this witness will be to try to give the Court a picture of the actual trade relations between du Pont and General Motors in rubber chemical products.

As in the case of prior witnesses who expect to appear on both General Motors and U. S. Rubber phases of the case, it is proposed to limit the examination of the next witness at this time to the General Motors aspect of the case.

I have talked to Mr. Harsha about this, and I understand that he agrees that that limitation is consistent with the practice that your Honor has approved in the case of other witnesses as being in the interest of an orderly presentation.

I will ask Mr. Bridgwater to take the stand.

ERNEST R. BRIDGWATER, called as a witness on behalf of the defendants; having been first duly sworn, was examined and testified as follows:

Direct Examination.

By Mr. Ragland:

Q. Please state your name and address.

A. Ernest R. Bridgwater. I live in Wilmington, Delaware.

Q. What is your occupation?

A. I am Director of Sales of the Rubber Chemicals Division of the du Pont Company.

[fol. 4959] Q. When did you come with the du Pont Company?

A. February 1st, 1924.

Q. Have you been in charge of sales of rubber chemicals products since that time?

A. Yes. I was engaged by du Pont for the purpose of setting up a rubber chemicals sales division, and I have been engaged in that activity ever since.

Q. Would you tell us briefly your service and your education before you came with the company?

A. I attended the University of Akron, and the Massachusetts Institute of Technology, where I took my degree in Chemical Engineering.

During World War I, I served in the Chemical Warfare Service. Immediately after the war I went to work for the B. F. Goodrich Company as a rubber chemist.

After about three years with Goodrich, I received an offer from the Firestone Tire & Rubber Company, which I accepted, also to work as a rubber chemist.

After I had been with Firestone for about two years, I received the offer to which I referred from du Pont to go with du Pont to set up the rubber chemicals sales organization.

Q. Will you describe briefly your duties with du Pont?

A. Yes. I have general supervision over all of our sales activities pertaining to rubber chemicals and neoprene.

Q. What do these sales activities that you mentioned consist of?

A. They consist of two closely related phases. First, I have two research laboratories, one at Deepwater, New Jersey, employing about 125 people, and one in Akron, employing about 20 people.

These laboratories are staffed by chemists and engineers who have had experience in the rubber industry, and they [fol. 4960] are engaged in research on the compounding and processing of natural and synthetic rubbers.

Their work is closely coordinated with the work of our customers, that is, the users of our products, and the function of our laboratories is to assist our customers in developing suitable formulations and manufacturing processes for the use of our rubber chemicals and "Neoprene."

They also serve as trouble-shooters when one of our customers gets into some difficulty.

Then I have a staff of 35 to 40 sales supervisors, sales correspondents and salesmen, all of whom are chemists or engineers, who serve in a liaison capacity between our laboratories and the chemists and the production experts of our customers. In that manner we endeavor to secure our customers' business.

They also contact end users of rubber products for the purpose of acquainting them with the properties of "Neoprene" and assisting them in finding rubber manufacturers who are competent to, well; both competent and adequately equipped to make whatever rubber products, whatever "Neoprene" products those firms may need in their business.

Q. What do you mean by the term rubber as you use it?

A. I use the word rubber in a generic sense to include natural rubber and all the synthetic rubbers, including "Neoprene" and also reclaimed rubber.

Q. Now tell us what rubber chemical products your department sells?

A. We sell rubber chemicals and "Neoprene." Rubber chemicals are chemicals that are used in the processing of natural or synthetic rubbers. "Neoprene" is a synthetic rubber which is very widely used in the automobile and other industries.

[fol. 4961] Q. Do your salesmen call on customers in the automotive industry in an attempt to sell these products?

A. Yes, indeed.

Q. Are you familiar with the sales of these products to the automotive industry?

A. Yes.

Q. What percentage of the total sales of your division is comprised of rubber chemicals?

A. About 15 per cent. The balance would be "Neoprene."

Q. How many rubber chemicals does your division produce and sell?

A. About 65.

Q. To what customers do you sell them?

A. We sell rubber chemicals to practically every rubber manufacturer in the United States and hundreds of rubber manufacturers abroad. We have somewhere between 900 and 1,000 domestic customers.

Q. Do you sell any rubber chemicals to General Motors divisions?

A. Yes. We sell to the two rubber manufacturing divisions of General Motors, that is, the Packard Electric Division and the Inland Manufacturing Division.

Q. Are you the principal supplier of rubber chemicals to these two divisions?

A. No. I understand that the R. T. Vanderbilt Company is and has been for many years. I believe we are the second largest supplier, and then there are a large number of others. For example, the Sharpless Chemical Division of the Pennsylvania Salt Manufacturing Company is a substantial supplier, also the Akron Chemical Company, and others.

Q. You spoke of the situation at the present time, Mr. Bridgwater. The complaint in this case was filed on June 30, 1949. Was the situation as to the suppliers of rubber chemicals to these two divisions the same then?

[fol. 4962] A. Substantially so. The R. T. Vanderbilt Company was the largest supplier, and I think we were the second largest. But I am not certain that the Sharpless Division of Penn. Salt was participating in the business at that time.

Q. Has your division attempted to obtain a greater proportion of the business of these two divisions than you have obtained?

A. Of course.

Q. Now I wish you would turn to the subject of "Neoprene." Would you describe briefly again that product?

A. Well, "Neoprene" is the first synthetic rubber that was made on a commercial scale in the United States, and I might add the first synthetic rubber that was made anywhere in the world excepting the subsidized manufacture in Russia, and in Germany also there was subsidized manufacture.

We introduced "Neoprene"—that is, we, the du Pont Company, introduced "Neoprene" in 1931. It is generally regarded, I think, as one of the outstanding achievements of du Pont research through all time.

Q. Mr. Bridgwater, the record in this case already shows the research about 1926 to 1928 in synthetic rubber by Mr. Thomas Midgley of General Motors Research Division.

What connection did that research have with du Pont's development of "Neoprene"?

A. None whatever. We who were engaged in the research that ultimately culminated in the development of "Neoprene" first learned of Midgley's work at a meeting of the American Chemical Society in the fall of 1928.

For some years prior to that time we had been experimenting with acetylene as a starting material for the [fol. 4963] manufacture of synthetic rubber. Midgley's approach was entirely different. It had nothing whatever to do with it. As a matter of fact, the first step in the process for making the synthetic rubber which is now called "Neoprene" was invented by Father Nieuwland, who was at that time the Professor of Chemistry at the University of Notre Dame. We acquired a license under his basic patent covering that fundamental acetylene reaction.

The subsequent steps in which the synthetic rubber was actually produced were invented by Doctor Wallace Caruthers, who was a distinguished research chemist in the employ of the du Pont Company and who also was the inventor of "Nylon."

Q. What are some of the qualities of "Neoprene" that make it useful in the automotive industry?

A. "Neoprene" is more oil resistant than natural rubber, although less oil resistant than some other synthetics. It is also resistant to deterioration from heat and sunlight.

Q. What other products compete with "Neoprene" for use in the automobile industry?

A. All of the rubbers, that is natural rubber, GR-S and butyl rubber, which are made by the Reconstruction Finance Corporation, and Buna-N type of synthetic which is made by B. F. Goodrich Company, Firestone Tire & Rubber Company, United States Rubber Company, Goodyear Tire & Rubber Company, also the vinyl plastics which are made by a large number of manufacturers including those four rubber companies I just mentioned, also in some cases leather and metals and other materials.

Q. How closely do these other synthetics and "Neoprene" resemble each other?

A. Well, superficially, they look and feel alike. It would [fol. 4964] be impossible for a layman to distinguish between them.

However, each one of them has certain points of superiority over the others.

Q. How do they compare in price?

A. Some are higher than "Neoprene" and some are lower than "Neoprene."

Q. How do automobile manufacturers and accessory manufacturers determine which they will use?

A. The determination is made by engineers, after considering the advantages and disadvantages of the various rubbers for the particular use under consideration.

Mr. Ragland: Your Honor, I now propose to show that other companies, and not General Motors, worked with du Pont in the development and application of "Neoprene" to the automobile industry.

By Mr. Ragland:

Q. Mr. Bridgwater, first, will you tell us what automobile parts involve the largest volume of "Neoprene"?

A. Radiator hose.

Q. Which manufacturers use "Neoprene" radiator hose?

A. Ford and Chrysler and some of the smaller manufacturers, but none of General Motors' divisions.

Q. Did any General Motors car ever use it?

A. Yes, Buick did at one time, but they have since discontinued its use.

I should explain, however, that I believe some General Motors trucks use "Neoprene."

Q. Have you ever tried to convince the passenger car [fol. 4965] divisions of General Motors that they should use "Neoprene" for radiator hose?

A. Yes, indeed.

Mr. Ragland: I wish to offer now the first exhibit in the book. It is No. DP 353, which is a memorandum dated April 12, 1949, from S. W. M. to J. B. L.

(Said document, so offered and received in evidence, was marked du Pont Exhibit No. 353.)

By Mr. Ragland:

Q. Who are S. W. M. and J. B. L.?

A. S. W. M. is a chemical engineer in our sales division, and J. B. L. is a chemist serving as a salesman for us in Detroit, and has the Pontiac Motor Division among his customers.

Mr. Ragland: I would now like to read the entire document. It is entitled "Pontiac Motor Co., Radiator Hose."

"RAK"—

By Mr. Ragland:

Q. Who is that?

A. R. A. Kurtz. He is one of our salesmen.

Mr. Ragland: (Reading):

"—has reported that Pontiac are interested in using GR-I."

By Mr. Ragland:

Q. What is that?

A. That is another name for butyl rubber, a competing product.

Mr. Ragland: (Reading):

"—in the construction of radiator hose and have asked Thermoid for quotations on a product of this type."

[fol. 4966] By Mr. Ragland:

Q. What is Thermoid?

A. A rubber manufacturing company in Trenton, New Jersey.

Mr. Ragland: (Reading):

"Since other car manufacturers are using neoprene radiator hose and believe it is worth while, we would like to demonstrate to Pontiac that neoprene will make the most serviceable product. To accomplish this, we will need samples of radiator hose constructed from GR-I and neoprene. Do you believe that Lampman—"

By Mr. Ragland:

Q. Who is he?

A. Lampman is the engineer whom we would have to sell in order to get neoprene specified for radiator hose in Pontiac cars.

Mr. Ragland: (Reading):

"—would be willing to furnish samples of hose for such a test or had we better obtain samples from some other source and present to him the results of any tests that we make as an accomplished fact. Any further information which you may have will be of help in setting up this program."

Q. Does this letter pertain to one of your efforts to convince General Motors that they should use neoprene in radiator hose?

A. Yes.

Q. Have you made similar efforts to sell other car manufacturing divisions?

A. Oh, yes, indeed.

Mr. Ragland: I now offer in evidence DP Exhibit 354, [fol. 4967] which is an excerpt from the development report of the rubber chemicals division, dated May 15, 1950.

(Said document, so offered and received in evidence, was marked du Pont Exhibit No. 354.)

By Mr. Ragland:

Q. By whom was this report prepared?

A. Mr. V. A. Cosler, one of my assistants.

Mr. Ragland: I will read only the last paragraph on the first page of this exhibit:

"Automotive radiator and heater hose, constructed of neoprene, is being used as standard equipment by Chrysler and Ford. Their experience in using this hose has demonstrated advantages for neoprene which justify its higher cost. Other automobile manufacturers, who are now using hose made from Butyl rubber, GR-S and reclaimed rubber claim that this hose is adequate for their purpose."

By Mr. Ragland:

Q. You have already testified that no General Motors car, except trucks, now uses neoprene radiator hose. What is your estimate of the dollar volume of additional neoprene that du Pont would sell if all General Motors cars did use neoprene radiator hose?

A. No less than \$750,000.00.

Q. Now, we will turn to another use of neoprene on the automobile. What is the next use you would like to discuss?

A. One important use is in adhesives.

Q. Will you explain the use of neoprene in adhesives?
[fol. 4968] A. There is a rapidly growing tendency among automobile manufacturers to fasten parts together with adhesive which were formerly fastened with mechanical fasteners. Many of the adhesives that are coming to be used for that purpose are based on neoprene.

Q. Now, give an example of this.

A. One very interesting example is the brake lining adhesive. Brake linings used to be adhered to the shoe by countersunk brass rivets. Several years ago, Chrysler developed a process of adhering the brake lining to the shoe with an adhesive cement that was based on neoprene. The advantage of this is that when the brake lining was fastened with rivets, they were countersunk only about half the thickness of the lining, so that when half of the thickness was worn away it became necessary to remove the lining, and in effect throw away half of it.

Now, however, with the so-called Chrysler Cycleweld adhesive process—that is the name they gave their process—it is possible to wear the brake lining right down to the bottom.

Q. Did you ever try to sell General Motors on using a "Neoprene" base for brake lining adhesive?

A. Yes, we did.

Q. Did GM ultimately adopt one?

A. Well, GM did ultimately adopt an adhesive process for adhering their brake lining to the shoe, but the adhesive they used is one based on the Buna-N type of synthetic rubber.

Mr. Ragland: I offer now Defendants' Exhibit DP-355 which is an office trade report written by S. W. McCune, dated February 8, 1945.

[fol. 4969] (Said document, so offered and received in evidence, was marked du Pont Exhibit No. 355.)

By Mr. Ragland:

Q. Who is S. W. McCune?

A. I previously identified him.

Q. The same one you identified earlier?

A. Yes, sir.

Mr. Ragland: This trade report substantiates Mr. Bridgwater's testimony regarding General Motors' attitude on neoprene adhesives. I do not wish to read from it at this time.

I now offer in evidence Defendant's Exhibit No. DP-356, a salesman's trade report of S. W. McCune, dated January 23, 1950, which discusses a call made by Mr. McCune and Mr. J.B.L.

(Said document, so offered and received in evidence, was marked du Pont Exhibit No. 356.)

By Mr. Ragland:

Q. That is the J.B.L. you previously identified?

A. Yes, sir.

Mr. Ragland: It is dated, or rather, the call date is January 11, 1950. The report indicates this salesman interviewed Ed. Zauel.

By Mr. Ragland:

Q. Who is Mr. Zauel?

A. He is an engineer in the Chevrolet Gear and Axle Plant.

Mr. Ragland: I would like to read only the third and final sentences from the last paragraph of this exhibit:

[fol. 4970] "The adhesive is then applied to the surface of the shoe and the whole assembly is cured under pressure at elevated temperature. After curing, each brake is tested by applying a load of 4,000 pounds in shear on the bond between the lining and the shoe. Every shoe is also subjected to a hammer test in order to make sure that the lining is bonded on firmly over the surface of the shoe. It is believed that the adhesive used in bonding these brake linings is a phenolic one which has been modified by compounding with a Buna-N Type of synthetic rubber."

Now, I would like to go to still another use of neoprene—for electric wires and cable.

By Mr. Ragland:

Q. What make of automobile first used neoprene for electric wire? . .

A. The Packard Motor Car Company used neoprene horn wire somewhere around 1934.

Q. Is horn wire the most important type of neoprene covered wire used in the automobile?

A. No. No, it is quite unimportant. The most important type is the ignition cable.

Q. What automobile was the first to use that?

A. Ford.

Mr. Ragland: We have located in the du Pont files, your Honor, a sales circular put out by the Ford Motor Company advertising certain features of the 1946 models of Ford cars and trucks. It is marked for identification but it is not in your book, your Honor. We have only the one copy. I would be glad to let you see it. I showed it [fol. 4971] to Mr. Houghins, for the Government, and it is marked for identification, and the witness will refer to it and read from it.

It is marked as Defendants Trial Exhibit No. DP356-A. We have no copies, and I do not propose to introduce it as an exhibit, but I wish to ask the witness several questions about it.

By Mr. Ragland:

Q. Mr. Bridgwater, is this the announcement of Ford's first use of ignition wiring, as far as you know?

A. Yes, this is announcement of the features that were embodied in Ford's first post-war models, and that was the first use, to the best of my knowledge.

Q. I wish you would read what the pamphlet says about neoprene ignition wiring.

A. Well, under the heading "Six cylinder engine features", it says, and the first four words are in bold face type: "New neoprene ignition wiring . . . oil, heat and ozone resistant."

On the following page under "V-8 Engine Features", exactly the same item appears.

Q. Does the pamphlet list any other use of neoprene?

A. Yes, under the heading "Six Cylinder Engine Features", and also under the heading "V-8 Engine Features" it says, "New front motor supports", in bold face type, and then ". . . made from oil resistant neoprene rubber . . . longer life".

Mr. Ragland: Does your Honor wish to examine this? The Court: Will you pass it up?

Mr. Ragland: I am sorry we don't have copies.

The Court: All right, proceed.

[fol. 4972] By Mr. Ragland:

Q. Did you know at the time about the adoption by Ford of these neoprene parts?

A. Yes.

Q. Were you pleased at Ford's uses of neoprene parts on any—

Mr. Harsha: I object to that. I believe that is immaterial.

The Court: Sustained.

By Mr. Ragland:

Q. Did General Motors ever publicize any use that it made of neoprene?

A. No.

Q. Now, I would like to go to still another important use, seals and gaskets.

Is that an important use on an automobile, Mr. Bridgwater?

A. Yes, it is.

Q. Do all manufacturers use neoprene seals and gaskets?

A. I think so, although Chrysler uses a great many more than any other manufacturer.

Q. When did the use of neoprene for seals and gaskets become common in automobiles?

A. The use became common in 1940. There were sporadic uses of small parts by various manufacturers prior to that, but it was in 1940 that the first substantial tonnage uses of neoprene appeared.

Q. What was the first company to use neoprene for this purpose—for seals and gaskets?

A. Chrysler. In their 1940 model they used a neoprene universal joint boot, which was a seal designed to protect the moving parts of the universal joint from dirt and dust. That was by far the largest neoprene part that had ever been used in any automobile, and its use, we thought, would [fol. 4973] probably stimulate other automobile engineers to use neoprene for other purposes, and we believe it did. It was the start of the substantial trend towards neoprene for seals and gaskets.

Mr. Ragland: I offer in evidence Defendants' Exhibit No. DP-357 which is the salesman's report of J. H. Norton, dated February 27th and 28th, 1940.

(Said document, so offered and received in evidence, was marked du Pont Exhibit No. 357.)

By Mr. Ragland:

Q. Who is "D.F.F." who is mentioned in the report?

A. D. F. Fraser. He was at that time a chemist in our rubber laboratory at Deepwater, New Jersey.

Mr. Ragland: Now, I would like to read just a small part of this report, reading the first two sentences:

"D.F.F. had been requested to return to assist in solving two problems. The first concerns the universal joint boot."

Now skipping down to the last two sentences of the first paragraph, I read:

"This is an extremely important problem because it involves from 1,000 to 2,000 lbs. of neoprene per operating day and because Perbunan——"

By Mr. Ragland:

Q. What is that?

A. A competing synthetic rubber.

Mr. Ragland: (Continuing):

"—is favored for this product."

[fol. 4974] It reads: "produce," but it should be "product."

"If we can solve the problem and get neoprene into production, it will be the first large-sized neoprene part going into automobiles as original equipment."

I now offer Defendants' Exhibit DP No. 358, which is a report of Mr. D. F. Fraser dated July 22, 1940.

(Said document, so offered and received in evidence, was marked du Pont Exhibit No. 358.)

Mr. Ragland: Before I read, I want to ask a question.

By Mr. Ragland:

Q. Can you tell us who Mr. W. J. McCortney, and Mr. J. Hendrick and Mr. J. Dudley, who are referred to in the report, are?

A. McCortney is in the engineering department of the Chrysler Corporation. He is head of Chrysler's rubber and plastics laboratory.

Hendrick and Dudley were at that time his principal assistants.

Q. I assume that the J.H.N. mentioned in the report is your salesman, J. H. Norton, to whom you have already referred?

A. That is right.

Mr. Ragland: I read the first two sentences of the second paragraph on page 2 of the report. It is right at the middle of the page, on page 2:

"The universal joint boot is being released for production. This neoprene part will probably be molded by Goodyear."

[fol. 4975] Then I would like to skip over to the third page, and read the first three sentences of the third full paragraph:

"Hendrick kindly provided me with all the Chrysler specifications covering synthetic rubber parts. The tabulation appearing below lists these specifications by number and title."

Then skipping down to the paragraph that is entitled "Special Note to Salesmen," I read:

"By means of copies of this trade report this list is being sent to the interested salesmen for information regarding the source of supply of the various parts. Naturally this information is to be considered as confidential and the fact that we are in possession of the specifications should not be divulged to your customers. In most cases the specifications list the rubber company's compound or designation."

I won't read any more from the report, but would like to call the attention of the Court to the lengthy list that appears on the next three pages of the report. It lists in detail the number, the title, the composition, and our suppliers of all the Chrysler parts then specified to be made of neoprene rubber.

By Mr. Ragland:

Q. Was this list of value to you?

A. Yes, it was, and may I explain that this was a list not only of parts specified to be made of neoprene rubber, but it was a list of parts, of all parts specified to be made from synthetic rubber of any type.

[fol. 4976] In most cases the Chrysler specification was so worded as to allow the rubber manufacturer to choose the synthetic rubber that he wished, and I should say that in most of these cases the specifications could be met by use of either neoprene or the Buna-N type synthetic, so this list was very helpful because it told us what manufacturers were Chrysler's preferred suppliers for each of these items, and hence enabled us to go to those manufacturers and attempt to convince them that they should use neoprene rather than the competing product.

Q. Did any General Motors divisions ever give you any such list?

A. No, sir.

Q. Have you ever tried to get them?

A. Yes, of course. It would have been very helpful, but we have been unable to do so.

Mr. Ragland: I now offer in evidence Defendants Exhibit DP No. 359, which is a report of D. F. Fraser, dated October 11, 1940, reporting calls at Chrysler on October 3 and 4, 1940.

(Said document, so offered and received in evidence, was marked du Pont Exhibit No. 359.)

Mr. Ragland: I will not read from this report at this time.

I offer in evidence now Defendants Exhibit DP 360, which is another report prepared by D. F. Fraser. This is dated August 25, 1941.

(Said document, so offered and received in evidence, was marked du Pont Exhibit No. 360.)

[fol. 4977] Mr. Ragland: I wish to read the first sentence of the third paragraph on page 2 of this report, that is about the middle of the page, which is as follows:

“While at Chrysler I went over the various neoprene parts now in use and the places on the car where we could expect to see neoprene used. The most interesting new development is that of rear spring covers.”

Right there follows a very lengthy list of neoprene parts, the parts that Chrysler was then using. I won't read that, but I call attention to the fact that this list contains some eighteen different parts, not including one part that is marked “to be discontinued.”

I wish to point out also that on pages 3 to 6 of the report is another list of the Chrysler specifications for parts in which synthetic rubber is used, and that this list includes many items which were not given on the list furnished du Pont thirteen months earlier.

By Mr. Ragland:

Q. I would like now to go to the last important use of neoprene that we will specifically discuss, that is, weather stripping for automobile doors. Is that used by any car manufacturer?

A. Not on a commercial scale at the present time, although it is under active development, and we think that neoprene veneered door and trunk weather stripping will very shortly be used, at least by Chrysler, if not by others.

Q. What automobile company has taken the lead on that?

A. Chrysler.

Q. Has neoprene been used by General Motors cars for weather stripping?

A. Yes. One of General Motors' suppliers has furnished [fol. 4978] a large volume of weather stripping with a neoprene veneer, but without having been requested to do so by General Motors, or rather by the Fisher Body Division, which is the division to which it is supplied—in fact, even without the knowledge of Fisher Body Division. We have been told by the engineer at Fisher Body who is responsible for the purchasing decisions with respect to this sort of material that, although they appreciate that neoprene veneer is advantageous, they would be unwilling to pay the modest added cost that its use would entail.

Mr. Ragland: I now offer in evidence Defendants' Exhibit No. DP-361, which is a salesman's trade report of J. B. Ledden, dated October 22, 1950.

(Said document, so offered and received in evidence, was marked du Pont Exhibit No. 361.)

Mr. Ragland: This concerns a call made by Mr. Ledden at Fisher Body on October 19, 1950. I will read only three sentences from this report, the third, fourth and last sentences:

“Beckerleg said——”

The title of the report shows Beckerleg was Fisher's chief engineer.

"Beckerleg said that he had been at Derby, Conn. a few days ago and had found out that Sponge Rubber——"

By Mr. Ragland:

Q. Who is Sponge Rubber?

A. Sponge Rubber Products Company, a very large supplier of weatherstrip to all of the automobile manufacturers.

Mr. Ragland: (Reading):

"—Sponge Rubber was supplying the neoprene veneered section of weatherstrip to Fisher. They have been doing this for the past 3 or 4 months and Fisher was not aware of it."

Then skipping to the last sentence:

"Beckerleg said that as far as he was concerned the item could have been made from GR-S natural or anything that Sponge desired and that under no conditions could it be assumed that Fisher wanted or required the neoprene veneer on this part. He did state further that it was to Fisher's advantage to have neoprene on the part but that certainly they were not going to pay an extra cent for the neoprene."

By Mr. Ragland:

Q. Have you covered now the major uses of neoprene in the automobile industry?

A. Yes, I have. There are many more minor uses. I have been informed that a Chrysler New Yorker contains 123 separate and distinct neoprene parts.

Q. Do General Motors cars contain that many neoprene parts?

A. No, not nearly that many. I don't know how many.

Q. I would like to conclude by asking you several very general questions, Mr. Bridgewater.

Have you ever been advised by anyone that there is an [fol. 4980] agreement between du Pont and General Motors which requires General Motors to buy any part of its needs of rubber chemicals from du Pont?

A. No, indeed.

Q. Or any agreement that requires General Motors to

use any automobile parts made from Neoprene on General Motors cars?

A. Absolutely not.

Q. To your knowledge has the fact that du Pont owns stock in General Motors been used in any way to sell your products to General Motors divisions or to try to persuade them to use automobile parts made with your products?

A. Not to my knowledge, and I feel quite confident that if it had been, I would have known about it.

Mr. Ragland: This completes the direct examination.

Cross-examination.

By Mr. Houchins: 4

Q. Mr. Bridgewater, I believe you told us that in the Rubber Chemicals Division of which you are Director of Sales, 85 percent of your sales were in neoprene and 15 percent in rubber chemicals, is that correct?

A. Approximately, yes, sir.

Q. And that—focusing our attention for the moment on rubber chemicals—that you supply rubber chemicals to General Motors Divisions, that is, Packard Electric and Inland Manufacturing Divisions?

A. That is right, sir.

Q. I think you told us that you were the second largest supplier of rubber chemicals to Packard Electric. Can you tell us what percentage, if you know, of Packard Electric's requirements of rubber chemicals you supply?

A. I think I said we are the second largest suppliers to [fol. 4981] the two combined. I am sure; however, also, that we would be the second largest to Packard Electric.

However, I have not recently inquired as to what percentage we enjoy of the Packard Electric business.

Q. Take the two combined.

A. I did recently ask our salesman in our Akron district office, who happens to call on both of these firms, I asked him to give me a fresh reestimate of the percentage of the General Motors business at those two divisions which we enjoy, and he said he thought about 25 percent, possibly a little less.

Q. What was the name of the man whom you asked for that estimate?

A. Mr. Stangor.

Q. What was his position?

A. He is a salesman—E. L. Stangor.

Q. I understand that there are a great many of these rubber chemicals. I believe you told us about 65.

A. Yes, sir.

Q. Can you name for us the three that you supply these two GM divisions, Packard Electric and Inland, in largest volume?

A. Yes. I think one of the three that would be the largest volume would be, well, a product that is commonly abbreviated as M. B. T. S. I think perhaps you don't want to clutter up the record with its chemical name, which is very difficult.

Another product is called Thiuram M. That is also an abbreviation, a nickname.

And I suspect that the third would be the product that we call "Thionex."

Q. Are these three products made by other people in the chemicals field besides du Pont?

A. Yes, they are.

[fol. 4982] Q. Are they generally made by other chemical companies?

A. Yes. I will have to distinguish between made by and offered for sale by. They are offered for sale by the R. T. Vanderbilt Company, the Monsanto Chemical Company, and the Akron Chemical Company offers MBTS, and the Sharpless Chemical Division offers "Thionex" and Thiuram M.

Now, the Akron Chemical Company, however, is not a manufacturer. They sell the products of American Cyanamid. The R. T. Vanderbilt Company sells for the Goodyear Tire & Rubber Company.

Q. Turning our attention to the larger subject, neoprene, neoprene was developed, as I understand it, or came out about 1931?

A. That is right, sir.

Q. When did it come into general usage, if it is yet in general usage?

A. Indeed it is in general usage. Why, I should say that by 1934 we had a hundred rubber manufacturers who were using neoprene, but in very small quantities.

By 1940 we had maybe three or four hundred rubber manufacturers using neoprene, but the quantities still were small.

After the war it became used in much larger quantities because it was then lower in price.

Q. Are there still a lot of bugs in neoprene that have to be worked out?

A. Oh, there are always bugs in everything. Nothing is perfect.

Q. What I mean by that is this: Is neoprene a product which is, speaking relatively to other chemical developments, still in its infancy, you might say?

A. No, sir, I would certainly not say that. We have been [fol. 4983] selling neoprene now for twenty-two years. The principal type of neoprene we now sell, known as neoprene type GN, was introduced by us in 1939, and has been unchanged since then.

I think any rubber manufacturer will tell you that neoprene is one of the most uniform types of rubber that he has to use.

Q. When would you say that that condition began to exist, that is, neoprene being a uniform type of rubber?

A: In 1935.

Q. Mr. Bridgewater, has Chrysler Motor Corporation collaborated with du Pont in any way in the development of neoprene or developing its uses, the various uses of it?

A. Not in developing the product, but in developing its uses, yes.

Q. Has it collaborated in a big way?

A. Yes, although in no bigger way than many, many other corporations.

Q. Has GM collaborated in developing uses of neoprene with du Pont?

A. Yes, but to a considerably smaller extent than Chrysler—smaller, I should say, also than Ford.

Q. I wish to refer at this time, if the Court please, to a document which we have marked as Government Exhibit 1325. It is a document which was given to us by counsel, No. 2 list, Document 50.

I now offer that document into evidence.

(Said document, so offered and received in evidence, was marked Government's Exhibit No. 1325.)

[fol. 4984-4985] By Mr. Houchins:

Q. Who was Sloman?

A. Sloman was a sales engineer for the United States Rubber Company.

Q. Is he a chemist?

A. I am not certain. I suspect so.

Mr. Houchins: I next offer into evidence a document which we marked Government Trial Exhibit No. 1326. This is on the No. 2 list, document No. 57, furnished to the Government by du Pont counsel.

(Said document, so offered and received in evidence, was marked Government Exhibit No. 1326.)

[fol. 4986] Q. Turning your attention to those GM companies who were using neoprene, speaking now specifically of radiator hose which you talked about in your direct testimony, you said that Buick once used radiator hose made of neoprene and then stopped.

When did they stop using neoprene radiator hose?

A. Oh, I don't recall exactly. They used it, I believe, shortly after the war, and discontinued its use maybe three or four years ago, but I can't be certain of those dates.

Q. Do you know why they discontinued its use?

A. Yes, because they thought the hose made out of cheaper synthetic rubber was adequate. Their engineering opinions, which, of course, they are entitled to, doesn't check with the engineering opinion of their big competitors, Ford and Chrysler.

Q. Generally speaking, are there synthetic rubbers competing with neoprene which are cheaper in price?

A. Some cheaper and some more expensive.

Q. Is there an honest difference of opinion, would you say, among engineers and technicians in the automotive field as to the merits of the use of neoprene over other rubber synthetics?

A. Sure, there are honest differences of opinion in any particular use with respect to the merits of the various engineering materials that may be used.

There is never anything that is perfect. An engineering decision always involves compromise. The question is which [fol. 4987] product has the best balance of desirable properties and the least harmful undesirable properties.

Q. So there is a difference of opinion, you would say?

A. Yes, of course there is. It is on the basis of the difference of opinion, for example, between General Motors engineers and the engineers of Ford and of Chrysler and most of the other companies that we get less business from General Motors.

Q. When Buick stopped using this neoprene radiator hose, did you understand that they stopped because they wanted to use a cheaper product, is that correct?

A. Yes, sir.

Q. Would you have the opportunity to keep that business if you had lowered the price of neoprene to meet this competitive price?

A. Oh, I think so, but of course we could not consider doing that because we sell "Neoprene" at the same price to everybody. It does not matter whether you buy a 50-pound bag a year or several million pounds a year, you pay exactly the same price, so if we were to reduce the price of neoprene for Buick, we would have to reduce it for everyone, and we could not afford to do that.

Q. That is the reason you did not reduce the price to Buick?

A. That is right.

Q. Was this difference in price for "Neoprene" when it was being used by Buick for radiator hose and this synthetic rubber a substantial difference in price? Was the synthetic substantially under "Neoprene", the other competing synthetic?

A. I should say the cost difference in the finished hose—that the finished hose made of "Neoprene" cost from ten to twelve per cent more than the competing product. They shave pennies.

[fol. 4988] Q. How is that?

A. They shave pennies. These automotive engineers consider one-fifth of a cent to be a very large sum of money.

Mr. Houchins: If the Court please, would you like to recess at this time?

The Court: The Court stands recessed for fifteen minutes.

(Recess taken.)

Q. Mr. Bridgwater, referring again to the sales of rubber chemicals to Packard Electric Company and Inland

Manufacturing Company, can you tell us, please, whether or not the du Pont Company has any sales records which would show the sales to those two companies of rubber chemicals?

A. Oh, yes, we have records which would show our exact sales to those two divisions, certainly.

Q. What would those records be called? How do you describe them?

into any sort of a monthly or yearly or other periodic master competitors.

A. Well, they are our accounting records, our records of

Q. That is, it would show his estimate of what percentage

Q. Is there any sort of a salesman's trade report which is written up covering the visits to most of the accounts?

A. Oh, yes, our salesmen write a report called a "Trade billings.

Report" on every call. The trade reports, however, would not show our exact sales, because we have, naturally, a much better record in the record of our invoices, but the salesman's reports show his estimates of the sales of our various of the business you were getting?

A. Well, never in terms of percentage, always in terms of pounds.

[fol. 4989]. He would say, with respect to each competitor, that he has learned, usually by talking to one of the chemists or engineers, that they are using a certain competitor's product for a certain purpose, and knowing how many units they make of that product, he would be able to figure quite accurately how much of that chemical they purchased.

Q. Now, are these salesmen's trade reports recapitulated report?

A. Yes, our salesmen write annually a master trade report in which they recapitulate what we call competitive information. That is information with respect to the sales by competitors.

Q. And would those master trade reports be kept for each customer?

A. For each customer, yes, sir.

Q. And filed that way?

A. Yes, sir.

Q. Now, turning again to the subject of neoprene, and

various of the competitive products of neoprene, can you tell us, Mr. Bridgwater, what product went into the manufacture of this rubber radiator hose, which Buick started using after it stopped using the neoprene hose?

A. Butyl rubber.

Q. Butyl?

A. Yes, that is a synthetic rubber made by the Reconstruction Finance Corporation.

Q. Now, speaking in terms of pounds, or any other unit with which you are familiar, can you tell us how much cheaper butyl is than neoprene?

A. Well, per pound it is quite a bit cheaper. Butyl costs, I think, around 24 cents, somewhere, and neoprene, the cheapest type of neoprene, is 41 cents.

However, that is a very deceptive thing.

Q. Excuse me. Are these current prices?

A. Current prices and they would have been approximately [fol. 4990] mately the same, at the time you were speaking of, but that is very deceptive, because neoprene is diluted with much higher percentages of cheap fillers, and extenders, than butyl.

It is not feasible to dilute or extend butyl as much as neoprene, so the relative costs per pound are really meaningless. The only cost that matters is the relative cost per foot of hose.

Q. Well, let's take that, then, relative cost per foot of hose.

Can you give us some idea per foot of what the relative costs are between butyl hose and neoprene hose?

A. Well, of course, there is a large number of sizes and some hose is curved, and some hose is straight.

Q. Well, the same type of hose.

A. But roughly, neoprene hose will cost ten, twelve, or maybe fifteen per cent more than butyl.

Q. Could you convert that into cents, or how many cents per foot for each of those two products?

A. Well, again, that is difficult, because, as I say, there is such a wide range of sizes, and some cars take a curved hose, and some a straight hose, and I don't know off-hand whether the Buick hose was curved or straight.

Q. Now, let us consider GR-S-11 which, as I understand it, is a competitive product to neoprene.

A. GR-S-11?

Q. Yes. That is what I thought I understood you to say. What is GR-S-11?

A. I am sorry. I think you have misunderstood me. GR-S is the most widely used synthetic rubber made by the Reconstruction Finance Corporation.

Q. Is that the same as butyl?

A. No, R.F.C. makes two types.

[fol. 4991] Q. Let us take Buna. What is Buna?

A. Well, Buna, as used in this country, is a generic term, more properly Buna-N. I think that is what you refer to. That is the expression I used. It is used as a generic term for butadiene-acrylonitrile co-polymer. That is called "Buna-N Type" of synthetic rubber, because the German I.G. was the first to make that type of synthetic rubber. They used the trade name "Buna-N," which, as I say, has come to be used in this country as a generic.

Q. Now, if you can answer this question, since it is a generic term, what is the relative costs between Buna-N and neoprene?

A. It costs more than neoprene. There are several types. There are four manufacturers and each manufacturer makes two or three grades.

I think all of the types are more expensive than neoprene. They may range from about—oh, maybe 15 per cent more to 40 per cent more. That is a rough approximation. I do not have the exact figures in mind.

Mr. Houchins: I wish to introduce in evidence at this time what has been marked Government's Trial Exhibit No. 1328. It is the No. 2 list, Document 64.

Mr. Ragland: Will you identify it further?

Mr. Houchins: That is all the identification I have of the document you supplied us.

(Said document, so offered and received in evidence, was marked Government's Exhibit No. 1328.)

Mr. Houchins: This is a letter dated February 7, 1939, [fols. 4992-4993] from the Rubber Chemicals Division of du Pont to General Motors Corporation, Detroit Diesel Engine Division.

I will read from the second paragraph. The letter is to the attention of Mr. G. W. Truxell, Jr., Chief Engineer:

"We note in your letter that you are using 'Neoprene' in your Diesel engine injectors. In this connection we are wondering if you have made any applications of our material which we might use as a write-up in 'The Neoprene Notebook.' "

By Mr. Houchins:

Q. This was in 1939, now, Mr. Bridgwater?

A. Yes, sir.

Q. Do you know if General Motors Diesel Engine Division continued to use "Neoprene" in its injectors?

A. I don't know whether they continued or not. That is a very tiny little piece, and a very unimportant use.

Q. Is there any other use of "Neoprene" made by the Diesel Engine Division of Electro-Motive?

A. I don't happen to know, but I would suspect that there must be, yes, because there is a lot of need for seals and gaskets about a Diesel engine, and I would think in the normal course of events we would get some of that business, and Buna-N people, of course, would get some, too.

I would hazard the suspicion that the Buna-N people would get about three times as much as we do.

[fol. 4994] Q. Would that be true in the case of General Motors, that is, when you were trying to sell "Neoprene" to be used in General Motors' cars, would you try to sell the sub-contractor?

A. Well, not to the same extent as Chrysler, because General Motors has the Inland Manufacturing Division which plays the same role as these fifty or more rubber manufacturers that I spoke of that supply Chrysler.

However, General Motors does buy some of its extruded rubber parts on the outside. You will recall that I spoke on direct examination of the seals that Fisher Body Division was buying.

Q. In a case of that sort, your job in du Pont would be to sell the sub-contractor, is that correct?

A. Our job is to sell the sub-contractor whether that sub-contractor be an outside firm or a division of GM, as in the case of the Inland Manufacturing Company,—well, not quite that either.

Our job is to sell both, because we must first get the automobile manufacturer, or the car manufacturing division in the case of General Motors, to write specifications which will permit the use of "Neoprene," and where there is a difference in cost, we must convince them that "Neoprene" is desirable and needed so that they will write the specifications that will require the use of "Neoprene" or some other high quality premium price synthetic rubber.

In many cases, these specifications are so worded that only "Neoprene" can be used. You can readily see that the fabricator—the sub-contractor—plays a minor role because the sub-contractors for GM are the same people that make parts for Chrysler and for Ford, but still, when they make them for Chrysler and Ford, they are much more often made of "Neoprene" than when made for GM.

That is because GM does not require "Neoprene", does not ask for "Neoprene", and does not want to pay the premium price for "Neoprene" in many instances.

Q. You say in many instances it is a matter of GM not wanting to pay the price of "Neoprene"?

A. It is, in many instances, not wanting to pay the price; however, in many more instances, it is a matter of their believing, or at least—well, I can give them credit for honesty. I have no reason to believe that they have any other motive than sound engineering opinion, but it just seems to happen that the GM engineers again and again—their engineering opinion favors Buna-N Type whereas in similar products, the engineers of Ford and Chrysler would favor "Neoprene".

[fol. 4997] R. B. K'BURG, called as a witness on behalf of the defendants, having been duly sworn, was examined and testified as follows:

Direct Examination.

By Mr. Ragland:

Q. Will you please state your name and address?

A. R. B. K'BURG. I reside in Wilmington, Delaware.

Q. What is your occupation?

A. Assistant Director of Sales of the Electrochemicals Department.

Q. Will you now state your various positions in your own way, with the company, and the nature of your work in these positions, and also your education before you came with du Pont?

A. After receiving my degree in Chemical Engineering from Lehigh University in 1928, and a Master's degree in Chemistry the following year, I started to work on August 16, 1929 with the Roessler & Hasslacher Chemical Company.

On May 1, 1930, R&H was purchased by du Pont.

I had started as control chemist with R&H, but at the time of the acquisition I was doing metallurgical research. For some years after the acquisition R&H operated under its own company name, but on December 31, 1932, it became a department of du Pont known as the R&H Chemicals Department.

Up to that time I continued in metallurgical research, but on the same day I was transferred to the Chicago district sales office as a salesman.

My position here in Chicago was to cover the automotive trade, automotive parts businesses in Michigan and Detroit. I continued in that capacity in Chicago and a little later as assistant district manager, until in June of 1942, when [fol. 4998] I was transferred to our Niagara Falls, New York, plant.

At the same time the name of the department was changed to the Electrochemicals Department of du Pont.

At Niagara Falls I was manager of cyanide products service and research, and I remained there for a year in that capacity, returning then to Chicago in June of 1943 as Chicago district manager.

We continued to cover the same territory until February 1, 1946, when we opened a new office in Detroit, completely independent of Chicago, and I went to Detroit as district manager.

I continued in that capacity in Detroit, calling upon the automobile trade in company with our salesmen, and all other industries in Michigan, until May 15, 1950, when I

went to Wilmington as assistant director of sales of the Electrochemicals Department which is my present position.

Mr. Ragland: I think that I might state that in the testimony of the witness and in my questions, I will often use the words "R&H"; that means Roessler & Hasslacher Chemical Company.

By Mr. Ragland:

Q. Are we to understand, in short, Mr. K'Burg, that you have been engaged in sales work calling on the automobile trade in electrochemical products from 1933 to 1950 when you went to Wilmington?

A. That's right.

Q. Did you have any personal acquaintance with the sales activities even prior to 1933?

A. Well, yes, in a limited way, in metallurgical research. [fol. 4999] I was also called upon to do considerable service work submitted by other technical men who were in the field at that time, and consequently I was in touch with the trade reports that they supplied and the trade problems which they submitted to the laboratory for solution.

Q. How often did you make personal calls each year on the customers?

A. Well, after I went into sales work in Chicago and then in Detroit, we called on all of our important customers no less than four times a year, and frequently as many as eight and ten and twelve times.

Q. So that we may get the products that you sell to the automotive industry in the proper perspective, I wish you would tell the Court how many of the various products your department does make and sell to everybody?

A. Our department makes and sells approximately eighty different industrial chemicals.

Q. How are they classified?

A. We divide them into six general groups; the sodium products; chlorine; peroxygen; formaldehyde; vinyls; and ceramics.

Q. To what customers do you sell various of these products?

A. We sell to practically every consuming industry in the United States.

Q. How many customers do you have?

A. We have approximately 8,000 customers.

Q. And what were the total sales of your department in dollars in 1947?

A. In 1947 exclusive of our interdepartmental transfers, our sales were somewhat over \$47,000,000.00.

Q. What were they in 1948?

A. They were almost \$51,000,000.00

[fol. 5000] Mr. Ragland: So the Court may understand just how much in dollars we are talking about, I call the Court's attention to the fact that the Government's Trial Exhibit No. 504 shows that in 1947 the sales of the Electrochemicals department of du Pont to all General Motors divisions, totaled \$1,019,272.00, and that for the first seven months of 1948 it totaled \$556,804.00.

By Mr. Ragland:

Q. Now, Mr. K'Burg, will you describe in a general way the sales procedures which you and the other salesmen associated with you, have used in selling your products to the automotive industry. Tell us just how you get and keep customers?

A. Well, to begin with, all of these products that we manufacture are highly specialized industrial chemicals, and consequently it takes technical training in order to sell them. Almost all of the men we have in the field, both our straight salesmen and our technical service representatives are technically trained men.

They also have been given training in our plants and laboratories before they are sent into the field.

It is their job to keep in touch with all of the technical developments in their respective lines of activity, and keep us informed what is going on, and we keep them informed through the laboratory of new developments, too. They are technically trained men.

Q. Do you and the other salesmen in your department, to your knowledge, follow any different sales procedures in trying to sell General Motors divisions and other customers for your products?

A. No, sir, we handle it alike for everyone.

[fol. 5001] Q. What products does your department sell the General Motors Divisions?

A. Well, principally the sodium products line. In fact, some 95 percent of the materials that we sell to General Motors divisions are in the sodium products group. The other five percent of them are minor sales of less important items.

Q. Can you classify into any general types these various products?

A. Yes, principally case hardening materials and electroplating materials.

Mr. Ragland: These are the two subjects that we will consider in detail, and before we do that, the witness will try to tell just exactly what these products are used for, but I think a few preliminary questions might be asked first.

By Mr. Ragland:

Q. When did du Pont start selling both of these products or any of these products to anybody?

A. Du Pont didn't start selling them until after the acquisition of R&H Chemicals in 1930. Prior to that time R&H enjoyed a very substantial business in this line of chemicals in all industries, prior to du Pont acquiring that business.

Q. Was the automobile industry the principal customer of R&H?

A. No. I would say that the principal industries which we sold were the textile and plastic and chemical industries as well as the automotive. They were certainly equally important.

Q. How did the acquisition of R&H affect the business transferred to du Pont?

A. Not at all. Our business continued along normal commercial lines.

[fol. 5002] Q. Were you informed at that time of any agreement under which General Motors Divisions were to give their sodium chemicals business or any other business to du Pont?

A. No, sir.

Q. Were you informed at that time of any conspiracy by which du Pont would get the sodium chemicals business, or any other business, at General Motors Divisions?

A. No, sir.

Q. Were you ever informed of any such agreement or such conspiracy?

A. No, I was not.

Q. In fact, did you, as a result of the acquisition, get any business of General Motors Divisions that R&H was not already previously enjoying?

A. No, not at all. As a matter of fact through normal technical developments and our regular commercial relations, we gained business and lost business over the years, but there certainly was no change.

[fol. 5003]

RECESS

[fol. 5004] The Court: Proceed, please.

R. B. K'BURG, called as a witness on behalf of the Defendants, having been previously duly sworn, resumed the stand and testified further as follows:

Direct Examination (Continued):

Mr. Ragland: The witness had completed his general statement just before the noon adjournment. Now, I ask him to turn directly to the two principal classes of products which his department sells to the automotive industry.

By Mr. Ragland:

Q. First we will take up surface hardening, or as it is called, case hardening of metals. Mr. K'Burg, will you explain just what it is?

A. In the simplest terms, case hardening is the name of a process of adding carbon to the surface of a piece of steel which, with subsequent heat treatment, will produce a hard surface.

Perhaps another way to explain it in more simple terms than that would be to mention that steel in itself has different degrees of hardness. There are hard steels and soft steels, and each of them has its purpose.

[fol. 5005] A good example of a hard steel is a file. A file has about, oh, three-quarters of one per cent to one per cent carbon. But it has that concentration of carbon all the way through the steel that composes the file. If you suitably

heat treat a file, it is very hard, as anyone knows who has ever used one.

On the other hand, a soft piece of steel would be similar to, well, wire, the sort of wire you find in a coat hanger which can be bent and twisted, and nothing happens to it. That isn't hard at all. If you put a file to it, you have no trouble cutting through it. That has very low carbon content.

Most any type of heat treatment that you might give to it after it is made would not harden it at all.

Case hardening is really a combination of both effects. You treat the steel in such a manner that you add carbon to the surface, and thereby, by suitable heat treatment, end up with a very hard wear-resistant surface.

But by combining that very hard wear-resistant surface with the softer, more flexible or ductile steel that is the base metal, then you have a combination of a hard surface plus a tough base.

You could apply that to something that we are all familiar with, or I think we are, like a gear, which is a good example. The teeth on a car gear, of course, mesh and intermesh a good many times in the life of a car, millions of times, in fact.

Now, the surface of those teeth must be extremely hard in order to stand up under that constant meshing and intermeshing. On the other hand, if the tooth of the gear itself were of the same hardness all the way through, it would easily break off and the gear would be completely useless.

The carbon content, therefore, in the surface of the gear must be higher than the carbon content on the interior of [fol. 5006] the gear, and that is done by case hardening.

The gear, or any part similar to it, whether it is used for automotive use, or otherwise, if it is case hardened, is exposed to an atmosphere or some condition which will enable the steel to absorb carbon.

The normal heat treating or case hardening process provides for heating the steel to red or yellow-red heat, say 1500 or 1600 degrees Fahrenheit. At that temperature steel will begin to absorb the carbon.

The transition from high carbon in the surface to a lower carbon in the middle of the case, to the normal carbon content of the gear itself, is very gradual, and you have dif-

ferent degrees of hardness then upon subsequent heat treatment, with the hardest surface being the tooth surface and the softer, or ductile part, being the base of the gear.

So you have a combination of hardness and strength.

Q. Now, explain just how the products which you sell are used to do that, to make the surface of the metal harder?

A. Well, our products for this purpose are sodium products, primarily sodium cyanide. The cyanide itself is used as a molten bath, which is heated to the temperature at which you must treat the steel in order to cause carbon absorption.

The carbon comes from the sodium cyanide.

The cyanide is melted in either internally or externally heated pots, and the work which is to be treated is immersed in the molten cyanide.

Q. Was that the standard way of doing case hardening when du Pont acquired R&H in 1930?

A. That was one of two standard methods.

Q. What was the other method called?

[fol:5007] A. The other method was called pack hardening. That was done by surrounding the part which was to be case hardened by that process with charcoal or coke or some form of carbon in a container, and then heating the entire container plus the contents and then subsequently treating with suitable heat treatment thereafter.

Q. Does your department sell any products for pack hardening?

A. No, sir.

Q. Is pack hardening still used in the industry?

A. Yes. It is used to a fair extent, although not to the extent it was at one time.

There are a number of reasons for that. It is dirty, and it is a cumbersome process, and costly.

Q. Are these two methods that you have just described still the principal methods for case hardening used in industry?

A. No. There is another process which has become very important in more recent years.

Q. What is that?

A. That is known as gas carburizing.

Q. Will you explain just briefly what that is, so we will have the picture of these three competing processes?

A. Gas carburizing is another method where you accom-

plish the same end by putting a case on steel. But in this case the equipment is usually a large muffle type furnace with perhaps a continuous hearth in it, through which a conveyor will run. The parts to be heat treated are run through the furnace and gas is introduced at high temperature through a pipe somewhere in the furnace. Subsequent heat treatment after that develops a hard surface.

Q. Going back to 1930, what automobile companies used the molten bath of the cyanide type that you first discussed?

[fol. 5008] A. All of them did—Ford, Chrysler, General Motors plants, Hudson, Nash, Studebaker. All of them used it for substantial amounts of case hardening at that time.

Q. From whom did those companies purchase their requirements?

A. The high test or 96 percent sodium cyanide, they bought most of it from R&H. However, there was some imported sodium cyanide available from a number of importers and also some smaller concerns.

Q. Have you mentioned the American Cyanamid Company?

A. No, sir. I didn't mention them. But American Cyanamid Company was a supplier of several grades of sodium cyanide, one of which they trade-named "Aerocase".

Q. Will you tell us briefly the way in which that product was being promoted in the early 1930's, if it was being promoted?

A. It was. In the early 1930's, "Aerocase" was placed on the market and was used by several concerns.

The chief advantage claimed for it was that it would produce a somewhat deeper case than would the cyanides which we were offering.

They conducted a trial installation—in fact it operated for quite some time—in the Buick plant in Flint. Buick at that time was manufacturing transmission gears for Pontiac and Oldsmobile as well as for themselves.

Q. Were there any other case hardening materials of the cyanide type that were being developed about the same time?

A. Yes, several companies were working on them after the development of "Aerocase". One of them was E. F. Houghton Co., who put on the market products called "Perliten" and "Perlitex".

[fol. 5009] The Park Chemical Company of Detroit intro-

duced several similar products which they variously trade-named "Parkcase". In a year or so the A. F. Holden Company came out with their products which they called "Holden Light Case" and "Hard Case".

Q. Did any of your customers switch to those new products?

A. Yes, they did; quite a few of them did, and it meant loss of business for us.

Q. What steps did your department take to meet this competition?

A. Well, when we first became aware of the need for a deeper hardening bath than we could get with straight cyanide, our laboratories started quite extensive study and experimentation to develop a product which could be competitive.

From the many experiments conducted, we came up with a product which we named "Ducase", which we introduced at the Warner Gear Company. Warner Gear was a division of the Borg-Warner Corporation. They were primarily Ford suppliers.

Q. Were your efforts to regain the lost business by the development of these new products successful?

A. Not entirely. As a matter of fact, "Ducase" in itself was not the complete answer to the problem. We had to continue our experiments and after a few years, we decided that in order to be sure we were on the right track we would have to develop something which would be of real use. We also thought we had better make a market survey of the entire industry in the Chicago area which at that time included Michigan. We called on every user, minor and major, in and out of the automobile industry, and contacted [fol. 5010] every user in the automotive industry in order to get this information to make as complete a market survey as possible.

Q. What year did you make that survey?

A. That was in 1937.

Q. Will you tell what estimates you based the survey on which you made then?

A. Yes, in so far as they applied to du Pont products, they came from our sales records from 1937, I believe, and previous years. Many of the other figures were obtained from estimates by our salesmen and myself who called on these various consumers of case hardening materials.

Q. Was your survey restricted to the automobile industry? I think you indicated that it was not.

A. No, it was not. In fact, everybody was surveyed at that time.

Mr. Ragland: I wish to offer Defendant's du Pont Exhibit No. 362, which is the first exhibit in the book marked R. B. K'Burg.

(Said document, so offered and received in evidence, was marked du Pont Exhibit No. 362.)

Mr. Ragland: This is a tabulation made from a survey in 1937. Mr. K'Burg testified about it. It is entitled: "Estimated Annual Requirements of General Motors Divisions and other automobile manufacturers of case hardening and heat treating materials sold by du Pont and other companies, respectively, selected from the general survey of all users of such products by R. B. K'Burg in September, 1937."

I wish to state that this exhibit has been put in its present [fol. 5011] form by counsel as an aid in the presentation. The listings here do not appear in the survey made by Mr. K'Burg and his associates in 1937 in exactly the same form.

In the form of the survey, there were about 150 different customers or potential customers, and they were grouped alphabetically according to cities and states in which the plants were located.

From it we have attempted to take all of the General Motors Divisions and group them together, and also to take the other companies that were in the automotive industry and group them together. The figures representing the total purchases for each of the two groups, and the percentage figures, have been computed by counsel and are made a part of the exhibit.

By Mr. Ragland:

Q. Mr. K'Burg, will you look at this tabulation now and state whether or not it accurately shows the figures selected from your survey?

A. Yes, it does.

Q. You have examined it in the past, have you?

A. I have.

Q. Do the companies which are listed on the chart as comprising the automotive industry buy most of the chemicals that you sell?

A. No, not most of the chemicals we sell. I think I mentioned before a large part of our business was with other industries such as plastics, chemicals, and textiles.

All of those are certainly equally important as the sources listed here.

Q. You will notice that the survey contains three Chevrolet divisions, or units under General Motors. I might say what they are so that you can follow:

[fol. 5012] Chevrolet Gear & Axle, Chevrolet Bay City and Chevrolet Parts Manufacturing. Why does this survey contain three instead of just one for Chevrolet?

A. Well, in the case of Chevrolet, with all the various divisions it had, and all the various plants that it had, it was necessary that a salesman or serviceman call upon each plant and attempt to sell them individually, inasmuch as it was Chevrolet's practice to buy completely independently.

The metallurgist or engineer or the people with whom we dealt always determined their own needs in the specific plants. Consequently we had to call on every Chevrolet plant to find out what was needed.

As a matter of fact, I think it is rather clear from this that Chevrolet was buying at least three different products from different suppliers at that time.

Mr. Ragland: I wish now to call the Court's attention especially to the fact that this chart shows that the estimate which Mr. K'Burg and his associates made in 1937, about twelve years before this case was filed, was that the ten General Motors divisions listed were buying in the aggregate less than half a million pounds of case hardening and heat treating products from du Pont, which was less than half of their requirements.

The fourteen other automobile companies listed were buying nearly two million pounds from du Pont, which was a far greater per cent of their requirements.

To be exact, the other automobile companies were buying 87.89 per cent of their requirements from du Pont, whereas the General Motors divisions were buying only 46.53 per cent.

[fol. 5013] Conversely, the General Motors divisions were buying 554,000 pounds or 53.47 per cent of their requirements from du Pont's competitors, and the other automobile

companies were buying only 263,000 pounds or only 12.11 per cent of their requirements from du Pont's competitors.

Ford, alone, bought more from du Pont than all of the General Motors divisions combined.

By Mr. Ragland:

Q. Mr. K'Burg, this chart does not contain any items showing the use of the gas hardening process. Why is this?

A. Well, at that time, the gas hardening process was just beginning to be developed. We didn't know much about it. It was incapable of being translated into pounds. You just don't buy pounds of gas.

We were particularly interested, of course, when we made this survey, in determining what we could do to compete with these case hardening baths like "Aerocas" and "Perliten", which were being placed on the market by competitors.

We found at the same time or uncovered a much more serious threat in the gas carburizing.

Q. Did this challenge actually develop as you had predicted during the period that you predicted?

A. No, not during the period we predicted. You see that was delayed by the war. Subsequent to the war, many gas process installations were made, and it really did cut into our cyanide business.

Q. Has any survey similar to this one you made in 1937 been made by you or anybody else in your department to your knowledge since that time?

A. No, sir.

[fol. 5014] Q. Will you tell us why?

A. Well, primarily because there was no need for another survey. I mentioned the reason for this survey was to determine the competitive position of deep hardening baths.

Q. Now, based on your market sales and its competitive position in the case hardening, what changes would you estimate a similar survey would show today?

A. I would estimate both within the General Motors Corporation consumption figures and the non-General Motors consumption figures, the percentages would be decreased.

I would also estimate that the percentage would be decreased more in the case of non-General Motors plants, but I do not think it would come down to as low a figure as at General Motors.

Mr. Ragland: While we do not have the survey with the exact poundage figures subsequent to 1937 to offer to the Court, I think it will help all of us to follow Mr. K'Burg's testimony to refer to a chart which is in the book. It is identified as Defendant's Trial Exhibit No. DP 363.

This shows in words what Mr. K'Burg will testify to in some detail.

This chart shows the various processes and the products for case hardening and other uses in General Motors divisions from 1930 onward. It was at that time that du Pont acquired the R&H Company, and started to sell this product. It was prepared by counsel from the information furnished by Mr. K'Burg.

The chart has been checked by him. The chart is intended to enable the Court and counsel to have before them a sort of guide to the testimony of Mr. K'Burg on this subject.

[fol. 5015] By Mr. Ragland:

Q. Mr. K'Burg, what was the basis of the information that you gave us for this chart?

A. Most of it was based on personal knowledge and contacts with these divisions of General Motors, also based on trade reports of our du Pont salesmen.

Mr. Ragland: During the course of Mr. K'Burg's examination, I intend to offer exhibits, but not read from them to any extent, but I think the reports will supplement his oral testimony.

By Mr. Ragland:

Q. Handing you this chart, I ask you to look at it, and I call your attention to the legend at the bottom left hand corner entitled;

"Identification of major competitive suppliers and products."

I believe in your previous testimony, you have mentioned all of the suppliers, and all of the products except perhaps "Kwicease", right at the very bottom under Park Chemical Company.

Will you explain what that is?

A. "Kwicease" is a case hardening salt sold by the Park Chemical Company.

Q. Which of the divisions of General Motors listed on the chart does its buying of your products independently?

A. Each of them do.

Q. How about Chevrolet which is shown as one item here. Does each plant buy independently?

A. Well, each plant of Chevrolet buys independently. It is a rather complicated story, because you have so many Chevrolet plants and quite a few of them do case hardening and it is necessary that we call on each one, call on the pur- [fol. 5016] chasing agent as well as others to attempt to get the business.

Q. Which one of the divisions on this chart of the General Motors Corporation would you say does the most case hardening?

A. Chevrolet is obviously the first one among the car manufacturing divisions, followed by Buick.

Among the non-car manufacturing divisions, the most important are Saginaw Steering Gear and Frigidaire.

Q. Now, I would like for Mr. K'Burg to tell in his own way about these most important divisions that he has mentioned. You did not mention Cadillac, but since this is the first item, I think I might have you explain in your own way, following the chart, just what happened?

A. Well, prior to 1930, at the time du Pont acquired the R&H, Cadillac was buying 75 percent cyanide-chloride mixture from us for its case hardening operations. They were also doing pack hardening at that time. Some time subsequent to 1930, a few years later, about 1935, exactly, the Park Chemical Company introduced a 60 percent case hardening mixture, which they induced Cadillac to buy instead of our 75 percent mixture.

Cadillac installed it and continued to use it in spite of our best efforts to get them to resume the use of our 75 percent product. After 1935, as a matter of fact about 1938, during the period when the deep hardening salts were being developed generally in the market, they installed a large bath of "Perlton," and they eliminated some of the salts being sold by the Park Chemical Company.

We tried very hard to get our salt baths in there at that time. In fact, I called a number of times on Mr. Roy Weber, who was their metallurgist, with Mr. Walter Gager who was in our Niagara Falls plant, and we induced Mr. Weber to try [fol. 5017] our salt bath. He ran it and we thought he found it to be satisfactory, but he would never install it. He continued to use Perlton.

When the war came along, Cadillac discontinued hardening to a large extent. They were making tank parts and they did not have much use for a salt bath.

After the war, they resumed where they had left off.

Well, I should say that, prior to the war, they started experimenting with gas, which was quite new at that time, and had some little success with it. Meanwhile, during the war they had learned something more about gas, and installed considerably more of it for postwar operations.

They continued to use some salt baths. They were buying some from the Park Chemical Company.

Later in the war years, or after the war, in 1948, 1949 and 1950, their use of gas had increased substantially, and each time this was done, they used somewhat less liquid hardening, although it was not cut out entirely. Cadillac car production, in the postwar years, increased substantially, but it has decreased its cyanide case hardening as I described right up to the present.

Q. Did you try to sell a greater quantity to Cadillac?

A. Yes, sir, we always tried to sell Cadillac anything we could.

Q. I believe you stated that the most important of all the divisions, as far as case hardening was concerned, was Chevrolet, although Buick was second. Since the order on the chart is Buick, then Chevrolet, I wish you would tell us briefly or describe briefly the developments at Buick.

A. Buick was an early operator of the American Cyanamid "Aerocase" process. They had never bought any [fol. 5018] cyanide from us. In fact, even before the acquisition of R&H by du Pont, they were buying the equivalent of our high test sodium cyanide from importers. They had started using the "Aerocase" case hardening process in the early 30's and continued for a little time. In the meantime we tried to get them to install "Ducase", although unsuccessfully. They were always experimenting with different products, and they tried some products of the Holden Company about that time, but the salt bath operations were not expanded too much because Buick was early interested in gas hardening. I think they were one of the first to put in gas hardening equipment. When the war was imminent, that is, when the war started in Europe, the importation of the French cyanide was cut off, and we were able to get their high test cyanide business.

Nevertheless, we still couldn't obtain any portion of their deep hardening salt business. Buick at that time had installed even more of the gas hardening equipment and were using substantially larger amounts of it on transmission gears, although there was some question, as I recall it, as to whether the quality was as good as it was in the liquid hardening baths. Nevertheless, they kept at it.

During the war, Buick did very little case hardening. They were making some machine gun parts and miscellaneous items, and there was not much case hardening to be done. But after the war gas hardening really came into its own at Buick. They substituted gas for many of their case hardening operations, although they did keep some baths going all the time for specialized jobs, where batch type operation was better in their opinion than continuous operation of the gas furnace.

We did sell them some sodium cyanide—the high test 96 [fol. 5019] percent sodium cyanide—subsequent to the war, but there was no real development along that line simply because of the general trend to gas.

That situation continued right along and is still true today, for that matter. Most all of Buick's case hardening is done with gas, what little material they use in the salt baths is supplied by competitors, primarily E. M. Houghton and Holden Chemical Company. The 96 percent cyanide they buy from us for case hardening purposes is used generally for tool room work, which is quite minor.

Mr. Ragland: The only other car division of General Motors that I am going to ask Mr. K'Barq to discuss in similar detail is the one he said was most important, Chevrolet.

By Mr. Ragland:

Q. I think you mentioned there are a number of Chevrolet plants. Of the twenty-five or so, which is the more important, as far as case hardening is concerned?

A. Well, Chevrolet Gear & Axle in Detroit is the largest customer of salt bath materials, followed very closely by the Saginaw Transmission Division in Saginaw.

Chevrolet Flint did a little; Chevrolet Toledo did quite a bit of pack hardening, and in later years Chevrolet Buffalo and Chevrolet Cleveland have done some heat treating also.

Q. I am going to ask you to restrict your comments to the

Gear & Axle and the Saginaw Transmission plants which you say are the most important.

I think you might explain, though, just how the item on the chart "Chevrolet" relates to those two. Does it cover just those two, or does it cover all of the Chevrolet plants? [fol. 5020] A. Well, it covers most of the Chevrolet plants in general. On the chart the item for the years 1938 to 1941, relating to the special mixture which was prepared by us, did apply to Chevrolet Gear & Axle almost entirely, although the results of that work led us to believe that we could obtain Chevrolet business, comparable Chevrolet business, at many of the other plants. Generally speaking it is pretty fairly consistent a story all the way across.

Q. Now take up the Gear & Axle plant, and tell about that.

A. The Gear & Axle plant, before 1930, was buying French cyanide from importers of that product, and not much from R&H, although we did sell them some.

In the period after the acquisition Chevrolet continued to buy—that is, Chevrolet Gear & Axle continued to buy French cyanide, and they also started in using the product of one of our competitors which I have mentioned, Houghton's "Perlton".

At one time during this period—in 1938, to be exact—I happened to be calling at the Chevrolet Gear & Axle laboratories and visited with their Mr. E. O. Mann and W. D. Huffman, who were metallurgists for the organization.

Both of them told me at that particular time that they were rapidly getting disgusted with the purchase of proprietary case hardening compounds—that is those sold under trade names—because they felt they were paying higher prices for products sold on that basis than they would have if they had a specification product of their own.

They told me they had also solved a similar problem some few years back in pack hardening materials by doing just that, by developing a pack hardening composition which [fol. 5021] suited their general needs, and giving it a specification number and offering it out to general competitive bidding by all suppliers.

They saved themselves substantial amounts of money by that. But when they told me they were interested in a product of their own—a specification product—that looked like a wonderful opportunity from our standpoint, to co-operate

with them and get some real business from Chevrolet, which we had not been getting.

I told Mr. Huffman and Mr. Mann at that time that we would certainly like to work the problem out with them, and if our Wilmington office would give approval we would start in right away. Obviously we were given that approval and we started working with Mr. Huffman and some of the other metallurgists at the Chevrolet Gear & Axle plant to find out just what would be the best product suitable for Chevrolet's needs.

We had several of our men from the Niagara Falls laboratory, including Dr. D. A. Holt, who was in charge of metallurgical research at that time, visit the Chevrolet plant, and after considerable experimenting and trial and error, we developed a product which looked to be very suitable for all of Chevrolet's needs at that plant.

Mr. Ragland: I now wish to offer in evidence Defendants' Exhibit DP 364.

That is the third document in your Honor's book.

(Said document, so offered and received in evidence, was marked DP Exhibit No. 364.)

Mr. Ragland: This exhibit consists of three excerpts from three R&H chemical department reports which are entitled [fol. 5022] in each case "Sales Research & Development Monthly Summary Reports". They are dated December, 1938, January, 1939, and May, 1939.

Most of the exhibits I will introduce, but not read from, but I think I might read a little from this.

I would like to read starting with the second sentence of this exhibit down through the second paragraph; that is the second sentence in the first paragraph, and all of the second paragraph:

"The new salt is giving excellent results and Chevrolet estimates that at ten cents a pound for Chevrolet #30 its cost per pound of steel treated is about 30 percent lower than that of two competitive salts now being used. (p. 7 of Report for December 1938)

"Operation of the experimental Chevrolet #30 bath at Detroit has been completed. Chevrolet's Metallurgical Department is preparing a formal report recommending this composition to replace Houghton's Perlton and Park Case. The bath, stabilized at 15 percent cyanide and two to three percent cyanate, is ideal

for their work and shows a thirty percent saving in materials over competitive products. After formal approval, all suppliers will have an opportunity to bid on this composition under a G.M. specification. Since we believe we can make this salt at a lower price than competitors, we should be able to obtain all the business."

By Mr. Ragland: .

Q. Did you obtain all of the business?

A. No, we did not. We obtained it first, of course, as an [fol. 5023] experimental order, as mentioned in the exhibit, but we had to follow up even on that to get Chevrolet started.

It was not until sometime in the early part of 1939 that Chevrolet finally agreed that they were about ready to start, but they had to run another trial of competitive material before they got at it.

In May of 1939 they actually bought their first lot—substantial lot—of Chevrolet No. 30, as we called the product, and continued to use it substantially, but even then they continued to operate some baths with competitive case hardening compounds.

Q. You testified that the other most important Chevrolet plant was Saginaw Transmission.

Would you discuss that in brief detail?

A. Well, Chevrolet Transmission manufactured transmission gears for the Chevrolet cars. They were using imported French sodium cyanide although they were buying some 45 per cent cyanide mixture from us at about the time of the acquisition and for a few years thereafter.

At the time we developed Chevrolet No. 30 we had a very ardent supporter for its use in the Chevrolet organization, in W. D. Huffman. In fact, he thought we would have no particular trouble inducing other Chevrolet plants doing case hardening of a similar nature, to use the Chevrolet No. 30, and consequently we promptly went up to Saginaw to see Saginaw Transmission Division, and I called upon Mr. C. M. Campbell, their metallurgist.

Well, Campbell said he was not particularly interested in Chevrolet No. 30, although he believed there was use for the product. One of the reasons for his feeling was that he had decided that he was going to make his own case hardening mixture out of imported sodium cyanide—that was the French material—and add to it salt:

[fol. 5024] He did that and continued to do so for quite some time. That was all the more reason why we wanted to sell him Chevrolet No. 30, because if we could it meant we were going to get some of the cyanide business that was going to the importers of French material. However, Campbell never did agree to even a trial of Chevrolet No. 30 and we never were able to sell him at Saginaw Transmission Division at all.

Q. Now going briefly to the non-car divisions, I believe you said that the most important of those from the standpoint of case hardening are Saginaw Steering Gear and Frigidaire.

I would like you to discuss those two briefly and pick up first Saginaw Steering Gear. That is the fourth item from the bottom of the chart.

A. Saginaw Steering Gear Division of General Motors, as the name implies, manufactures steering gears for all car divisions. They didn't at all times, however. In fact, part of the work of that nature was transferred to them, I believe around 1936, from the Brown-Lipe-Chapin Division plant in Syracuse. But even before that they were doing some work along those lines and were a substantial user of case hardening materials.

They were using 96 per cent sodium cyanide at that time. They were buying some from us, and some of it from the importers of the French product.

However, after they moved the Brown-Lipe-Chapin business to Saginaw Steering Gear, case hardening expanded considerably at that location, and they put in some new salt baths.

We were unable to get our products in there at that time. [fol. 5025] They were using mostly materials from Park Chemical Company.

At the same time the trend toward gas carburizing was apparent to everyone in the organization, in General Motors and elsewhere. Saginaw Steering Gear started to look at gas carburizing, and did put in a gas furnace. Some of the work was transferred to that.

Then the war came along and car production was discontinued, and Saginaw Steering Gear started manufacturing machine gun parts. They were using some liquid baths using some of our sodium cyanide, the high test material, because there was no longer any French material

available, for minor amounts of work, but using their gas furnaces and the Park Chemical Company product mostly.

After the war they went back to manufacturing steering gears, of course, and they put in some additional case hardening furnaces, both gas and salt. They put in the Park Chemical Company's material—I believe their No. 5-C salt—in the new furnace. We thought that we were going to be able to get some business out of that, because we felt that our new water soluble case hardening salt would be even better than Parkease 5-C.

Roy Griffin, who was metallurgist at that plant at that time, agreed to a trial, and it was run, and everything seemed to be quite satisfactory. In fact, the heat treaters at the plant liked it very much. But we never did get any orders. Griffin never specified the material to the purchasing department, and we didn't get it. They continued to put in gas operations, and, except for 96 per cent cyanide which we continued to sell them in small amounts for minor operations, all the case hardening business at Saginaw Steering Gear still goes to our competitors, either Parkease salt, or we have lost it by virtue of the gas hardening process.

[fol. 5026] Q. Now finally as to this case hardening chart, take up Frigidaire and tell us in the same way about it. Frigidaire is the third from the bottom.

A. Frigidaire was buying practically all of their high test 96 per cent cyanide from the old R&H Chemical Company before the acquisition, and for a couple of years thereafter. But then they switched almost entirely to the imported French product.

They didn't do as much case hardening at that time as they have done subsequent to the war, but they did do a fair amount, and they used entirely competitive materials.

During the war, of course, the type of work that Frigidaire did did not require case hardening, but after the war they decided they were going to have to do a lot more heat treating on some of their compressor parts. They conducted a survey of their own, a cost study primarily between the gas process and salt bath hardening, and came to the conclusion that the salt bath would be more economical than gas for their purpose.

They did install a very large salt bath furnace for a carburizing type salt bath, and at first we got some business out of that. They also investigated American Cyana-

mid's "Aeroheat" product at that time, and used that more or less along with ours, but we had most of the business when they first put the bath in.

However, in subsequent years this ratio has changed, and now we get the short end of the business at Frigidaire. American Cyanamid continues to get most of the carburizing salt business there.

Q. Did you attempt to sell each of these General Motors Divisions that are listed on the chart more of your materials for case hardening than you were able to sell?

[fol. 5027] A. Yes, we continued to call on all of them and tried to sell our goods at all times to these people.

Q. Was there any exception to that?

A. None whatsoever.

Mr. Ragland: In completion of Mr. K'Burg's testimony concerning case hardening, I wish to offer now these other exhibits.

These are several reports which supplement his oral testimony and confirm certain of the statements made in the chart concerning divisions not covered in detail in Mr. K'Burg's oral testimony. I will not read from them.

The reports which I wish to offer are marked for identification as follows:

The first is Defendants' Exhibit No. DP-365, which is an excerpt from the report for February, 1933, of the R&H Chemicals Department to the Executive Committee dated March 21, 1933.

(Said document, so offered and received in evidence, was marked du Pont Exhibit No. 365.)

Mr. Ragland: The next document I wish to offer is marked Defendants' Exhibit No. DP-366, which is an excerpt from the report of the R&H Chemicals Department for April, 1933, to the Executive Committee of du Pont, dated May 25, 1933.

(Said document, so offered and received in evidence, was marked du Pont Exhibit No. 366.)

Mr. Ragland: Next I offer Defendants' Exhibit No. DP-367, which is an excerpt from a report of D. A. Holt, [fol. 5028] entitled "Metal Cyanide Research," dated September 7, 1933.

(Said document, so offered and received in evidence, was marked du Pont Exhibit No. 367.)

By Mr. Ragland:

Q. Who was D. A. Holt, Mr. K'Burg?

A. Doctor D. A. Holt at that time was in charge of metallurgical research at our Niagara Falls Laboratory.

Mr. Ragland: The next document I offer is Defendants' Exhibit DP-368, which is an excerpt from a report by W. M. Gager, of the technical service department of the R&H Chemical Company, entitled, "Sodium Cyanide—its Present Status in the Steel Treating Industry"; dated December 19, 1932.

(Said document, so offered and received in evidence, was marked du Pont Exhibit No. 368.)

By Mr. Ragland:

Q. Can you tell us a little bit more about who Mr. Gager was?

A. Mr. W. M. Gager was a technical service man who traveled throughout the heat treating industry extensively and called upon all of our accounts in connection with our case hardening products.

Mr. Ragland: I next offer Defendants' Exhibit DP 369, which is an excerpt from a report of R. B. K'Burg, entitled, "Division Progress Report for January 1,—July 1, 1931" dated August 18, 1931.

(Said document, so offered and received in evidence, was marked du Pont Exhibit No. 369.)

[fol. 5029] Mr. Ragland: I next offer DP Exhibit No. 370, which is a report by W. M. Gager, dated November 15, 1928, reporting a call at the Delco-Remy plant in Anderson, Indiana, for the R&H Chemical Company.

(Said document so offered and received in evidence was marked DP Exhibit No. 370.)

Mr. Ragland: I purposely did not offer in evidence at the start, until I had put in these reports and after Mr. K'Burg had made his statements about some of the divisions, the No. 2 item in your book, Defendants' Exhibit DP 363.

I now wish to offer that.

(Said document so offered and received in evidence was marked DP Exhibit No. 363.)

By Mr. Ragland:

Q. There remains now the second major group, the electroplating uses of your chemical products.

Will you tell us what electroplating is?

A. Electroplating is the name of the process used to deposit one metal on top of another through the use of a direct electric current, that is, a current which flows in one direction only.

A good example, perhaps, of electroplating might be this microphone. The base metal would be the starting point, and on top of that might be plated, say, copper or nickel or chrome, or all three of them.

While it might not be apparent, you could section this microphone, and examine it under a microscope, and you would see successive layers of the metals which have been added on top of the base metal. Each of those is called a plate, and each one is electroplated thereon.

[fol. 5030] It is something like if you cut a tree in half, you can see the annular rings in the tree with the naked eye. This requires microscopic examination because each layer is extremely thin.

It has two purposes. One is for rust protection. That is, the base itself would rust or corrode easily, and by putting on additional layers of other metals, you end up with a product which withstands atmospheric corrosion.

It has another purpose, which is strictly decorative. You see that on the cars—bumpers, grilles, door handles, and interior parts of a car also.

In order to visualize electroplating better, perhaps it would be well to start with an actual example in the automotive industry, like the bumper. The bumper is a stamped piece of steel, stamped into the form in which it is to be put on the car. The bumper itself is of no particular use on the car if it isn't covered with something which adds some protection to it, and as far as the car purchaser is concerned, he wants something which is an item of beauty.

So they put on a final chromium plate.

But that bumper goes through a series of stages in the electroplating process. The most important part of it, of course, is the actual part of the process where the plating

takes place. That is, the tank containing a solution of chemicals and also the anodes.

The anodes are the pieces of metal—the material which is to be deposited on the bumper. If it is copper, the slabs, the anodes, are copper. If nickel, they are of nickel.

The anodes are hung along the sides of the tank, and the work to be plated, in this case the bumper, passes [fol. 5031] through the tank by conveyor methods or otherwise, and in between the rows of anodes.

A source of direct current is provided by generators, and the generators are connected to the bar on which the anodes hang. The chemicals in the solution are put in there to enable the metal which is to be plated to be conducted more readily from the source, that is the anode, over to the part to be plated, in this case the bumper.

The actual plating process, then, the actual deposition of copper, using that as an example right now, requires a direct current through the anode bar and through the anodes themselves. Little particles of copper, microscopic particles of copper are dissolved off and they carry an electric charge, and they go through the solution to the part to be plated where they are deposited on there in the same form—that is, little microscopic particles.

A succession of those over a period of time results in a plate, a coating of that copper. If it is nickel, it is nickel. But that is generally the way it works.

Q. If an automobile company or an accessory maker wants to do electroplating, will you list the things that that company has to buy?

A. Well, in the first place they have to have the equipment, including the generator capacity and things of that sort.

A good example of what you have to have might be the post war installation at Pontiac, which is I think, the world's largest. It is a series of tanks for cleaning and plating some 600 feet long, and cost, I understand, in the neighborhood of \$2,000,000.

The bumper, as it comes from the stamping machines, is brought to one end of the Pontiac chain automatically on [fol. 5032] a conveyor, and transferred automatically to the conveyors that run through this 600-foot long plating machine which puts on copper, nickel and chrome.

The first series of steps, of course, would be the cleaning

procedure, and then the copper strike, which is just a flash—an extremely thin deposit of copper—which is almost invariably done on steel no matter what the end use is.

From there it goes through a series of rinses and then through the copper-plating tank.

One of the reasons why the tank must be so long is that in order to plate a predetermined thickness of copper or nickel, or a combination of both, you know the rate of travel through there because of the speed of the conveyor, and the tank must be just so long that in the period of time that it takes for the bumper to go through, it ends up with a thickness of copper equivalent to what the engineers want.

From there it is transferred through nickel and chrome and suitable rinses in between.

Q. Does du Pont sell any of the equipment? You said that Pontiac purchased about \$2,000,000 worth for its plant. Did du Pont sell any of that?

A. No. We do not participate in the equipment business at all.

Q. What electroplating products do you sell?

A. We sell the chemicals which make up the electrolyte or the solution for conducting the metal from the anode to the part to be plated.

In addition to these chemicals—primarily sodium cyanide, because our interest is in the cyanide processes—we sell brighteners, addition agents that enable one bath to operate differently than another or produce different desired effects.

[fol. 5033] We at one time sold copper anodes, but now we do not. We do sell cadmium anodes, however.

Q. Did you sell zinc anodes?

A. We sold zinc and tin anodes at one time, but we no longer do. Our interest is in the chemicals.

Q. I understand that the most important of the various forms of electroplating to you is copper plating, is that so?

A. That is right.

Q. I wish that you would tell us the various types of bath or solution that are on the market for that?

A. There are three principal types. First is the alkaline or cyanide type bath which we market, as do a few other

competitors. There is the acid type process, one of which was developed—well, it isn't sold by General Motors Research, but was developed by them and promoted by them.

The Day-Brite process is another acid process marketed by the Dayton Bright Copper Company.

The third classification is the pyrophosphate bath for copper plating, which is marketed by the United Chromium Inc., and it is called Unichrome.

Q. When did automobiles, if you know, start using chromium plating for the thin layer at the top?

A. That was back in the '20's. I think about 1926 Oldsmobile was the first one to endeavor to use chromium plating.

Prior to that car finishes were usually painted or brass, or just had a nickel deposit on top of brass, but none of these was too satisfactory.

Q. How do nickel and copper compare in cost?

A. Nickel as a metal costs over twice as much as copper, and of course in the plated form, starting with the nickel anode versus copper anode, it costs more to plate nickel than it does copper.

With the advent of chromium plating, it was necessary [fol. 5034] that some improvements be made in the basic metal deposited prior to chromium. That resulted in a very keen interest in copper plating, and a little later it developed a substantial need for heavy copper deposits.

Q. What company was the first to develop an improved copper plating process?

A. Du Pont was.

Q. About what date was that?

A. That was about 1934.

Q. To what companies did you first offer your new process for trial?

A. The first concern with whom we discussed high speed copper plating, as we called it—well, we called it bright copper plating to begin with, then high speed copper plating—was Thomas Steel Company in Warren, Ohio.

Later we talked with the Buckeye Bumper Division of Electric Auto-Lite Company in Springfield, Ohio, who at that time were plating primarily for Chrysler.

We also went to Keystone Chromium Corporation, a large job plating plant at Buffalo, New York. That was an

ideal place for us to discuss bright copper or high speed copper because of its proximity to our laboratories at Niagara Falls, where we could watch over the solution very carefully and offer the service which is necessary to make solutions of this type function properly.

Q. During the period that you made these offerings of your new product, were you trying to arrange for a trial installation of your new process at any General Motors plants?

A. Yes. We were calling regularly on Mr. W. M. Phillips, who was manager of the Electro Chemistry Department of General Motors Research Division, and we called on all the car divisions and some accessory divisions which were interested in copper plating.

[fol. 5035] Mr. Ragland: I now wish to offer in evidence Defendant's Trial Exhibit No. DP 371, which is an excerpt from a report of the Electroplating Division to the Executive Committee of the du Pont Company, entitled "Technical Accomplishments for 1938," dated February 2, 1939.

(Said document so offered and received in evidence was marked du Pont Exhibit No. 371.)

Mr. Ragland: This is one of the few documents that I would like to read from:

"Our foremost technical contribution to the electroplating industry was the perfection of the 'Du Pont High Speed Copper' Process. The process was announced in October and has found ready acceptance by the trade as it filled a long-felt need. Sixty-three companies have purchased materials for 'High Speed Copper' plating installations, 14 of these being commercial production units. Gross sales during 1938 were \$15,235, with 1939 sales of salts, brightener, and anodes estimated at \$150,000.

"Through the cooperation of the two laboratories a process was developed that makes possible the speedy deposition in appreciable thicknesses of smooth, bright copper plating which can be readily buffed."

By Mr. Ragland:

Q. What is "buffed"?

A. That is another term for polishing.

Mr. Ragland (Reading):

"The ultimate cost of copper applied by the process should be considerably less than old-type copper plating [fol. 5036] baths. The increase in production, reduction in power requirements, and ease of buffing far offset the higher initial costs. The properties of 'Du Pont High Speed Copper' indicate that it may find extensive use in new applications where copper cyanide baths have not previously been used; e.g., heavy deposits on steel wire and printing rolls, and for electroforming. Pending outcome of exposure tests and modifications of specifications, there is a possibility of this copper displacing a portion of the nickel now used as an undercoat for chromium. This should extend the use of copper plating, particularly in the automotive industry, since the lower cost of the 'Du Pont High Speed Copper' Process will enable the plater to increase depth of the copper plated layer, and decrease thickness of the more expensive nickel overcoat, at the same time eliminating a buffing operation."

By Mr. Ragland:

Q. Mr. K'Burg, of the 63 companies mentioned, which of these were divisions of General Motors?

A. Cadillac, Ternstedt; Brown-Lipe-Chapin, Delco-Remy.

Q. Wasn't A. C. Spark Plug?

A. A. C. Spark Plug was one of those instead of Delco-Remy.

Q. Four out of 63, in any event, was it not?

A. That is right.

Q. How many of the 14 commercial production units that are listed were General Motors Divisions?

A. One, Cadillac.

Q. I think that before we take up the General Motors Divisions you might tell us a little bit more about what [fol. 5037] the other automobile companies do. I think you mentioned that you took it first to the plater for Chrysler, Buckeye Bumper, and to Keystone Chromium Corporation, the large job plating firm.

How about some others? How about Ford?

A. Ford was one of the first to become interested in high speed copper and Packard was also. We actually obtained an installation in Ford Motor Company in 1938. I called there with Mr. F. F. Oplinger, who at that time was assist-

ant manager of our Electroplating Division, and we saw Mr. L. P. Brockway, their plating superintendent, and induced him to make a trial of high speed copper.

He did put in an experimental installation. It performed quite satisfactorily and resulted in a production bath. Ford didn't do a lot of plating at that time but nevertheless they did find a use for it.

Packard, on the other hand, did a lot of plating and had fairly substantial facilities for that purpose. Their Mr. James Higgins, at that time metallurgist for the company, visited our Niagara Falls laboratories and we did a lot of plating for them to demonstrate what could be done in their own plant.

This resulted in a substantial installation of high speed copper at Packard, followed up a year or so later with several more. Packard has always operated our high speed copper to a very substantial extent.

Q. You mentioned that Ford didn't do too much of its own electroplating at that time. Will you compare the practices as to whether the automobile maker does its own electroplating or whether it farms it out or has jobbers do it, as between General Motors Divisions and companies like Ford?

A. Well, General Motors relies primarily upon its non-[fol. 5038] car production divisions, such as Ternstedt, Brown-Lipe-Chapin, and Guide Lamp, to do most of their plating where they don't actually do it themselves in the car producing plants.

It was Ford's practice, and it has always been Chrysler's practice, to job out that type of work. In fact, the parts were often made by others and plated according to Chrysler's specifications, and then Chrysler would put them on their cars.

At Hudson, most of their work was jobbed out. The same is true at Studebaker and Nash. I mentioned that Packard did most of their own.

Q. What was the situation at some of these accessory makers for Chrysler and Ford and other companies? From whom did they buy their needs of the bath solution, the thing that you sold?

A. Many of them became very substantial users of high speed copper solutions. I can name quite a number.

Q. I wish you would for the record.

A. One of the most important is the Doehler-Jarvis Company in Grand Rapids, Michigan; which is a very important Chrysler supplier, and has always been. They manufacture die castings for Chrysler and plate them.

Two other very large users of high speed copper were the Electric Auto-Lite Divisions, one in Woodstock, Illinois, and one in Cincinnati, Ohio. Electric Auto-Lite has always been a major Chrysler supplier, but also did plating for practically all the independent companies, like Hudson, Studebaker, and Nash.

There were two substantial concerns in Detroit proper that put in high speed copper—Ainsworth Manufacturing Company and Glenvale Products Company, both of which were big suppliers for Ford, Lincoln and Mercury.

[fol. 5039] The Hurd Lock Company in Adrian, Michigan, which was a big supplier of Ford's, put in high speed copper and operated it quite successfully. Continental Die Casting Company in Holly, Michigan, and Detroit, installed high speed copper. They did a lot of work for non automotive concerns with high speed copper, and they did some automotive overflow work.

A good example was the Precision Casting Company in Kalamazoo, Michigan, which put in high speed copper after experimenting with one of our competitors' process and having quite a bit of trouble. They put in high speed copper and operated it very successfully.

They plate refrigerator hardware and handle almost all of Oldsmobile's overflow.

A couple of concerns outside the automobile industry were Keeler Brass Company in Grand Rapids, and Applied Arts Company in Grand Rapids—also Winters & Crampton Manufacturing Company in Grandville, Michigan, who manufacture refrigerator hardware.

All these people used high speed copper very satisfactorily.

Q. Did all of these companies do work for the automobile industry?

A. No, not all of them. Winters & Crampton, I think, did not do very much.

Q. Are there any others that did not?

A. Oh, I think we can think of some more. Most of them did something for the automotive industry, although some

of them confined their operations to non-automotive hardware, such as furniture and refrigerator work.

Q. Were these accessory companies using du Pont high speed copper exclusively in 1948?

A. Yes.

Q. In what respects, if any, did your sales efforts in [fol. 5040] selling these companies on the use of du Pont high speed copper differ from your sales efforts at General Motors divisions?

A. In no respect at all.

Q. I should like, just as we did in the case of case hardening, to refer to a chart, which has been marked for identification as Defendant's Exhibit No. DP-372.

This shows in a graphic way the various copper plating processes and their uses at General Motors divisions, so that the Court and counsel may have it before them as sort of a guide, just as we did for case hardening.

This chart, I should like to say, was also prepared by counsel from information furnished by Mr. K'Burg, and has been checked by him, just exactly as the case hardening chart.

Mr. K'Burg, what was the basis of the information that you gave us for this chart?

A. This is based upon my recollection of calls upon almost all of these General Motors Divisions as well as departmental records.

Q. Just as I did before, during the course of Mr. K'Burg's remaining examination, I intend to offer as exhibits the trade reports which supplement his oral testimony.

If you will look at this chart now, I call your attention to the legend at the bottom left-hand column entitled "Identification of Processes."

Will you explain that in a little detail?

A. Yes. The "du P", of course, refers to the du Pont high speed copper process, which is an alkaline cyanide process.

"H-VW-M" is the Hanson-Van Winkle-Munning process, another alkaline cyanide process.

"MacDermid" refers to the MacDermid, Incorporated, [fol. 5041] "Rocheltex" process which again is an alkaline cyanide process.

"Unichrome" is the process of United Chromium, Inc., a pyrophosphate type bath.

"Day-Brite" refers to the process of Dayton Bright Copper Company, an acid copper process.

"GM acid" is the process developed by General Motors Research Division, and is an acid process, as it says.

"Wessex" is an alkaline cyanide process marketed by Westinghouse Electric Corporation.

"Rochelle" refers generally to the old type cyanide copper process, which was used for many years, using Rochelle salts as an addition agent, that product being offered by many people.

Q. Which of these General Motors divisions does the largest amount of electroplating?

A. Among the car divisions, Chevrolet does more by far, and Cadillac, of course, does a very substantial amount.

In the non-car divisions, Ternstedt is out in front by a long way.

Q. We will just discuss primarily Chevrolet and Ternstedt, the two big ones.

I think we might start, in order to qualify this and do it very briefly, with Cadillac, the first item on the chart. Tell us very briefly about Cadillac, if you will?

A. Cadillac was the first of the General Motors divisions to make an installation of high speed copper. That occurred in 1938. In May they put in an experimental tank of a few hundred gallons, followed up by another installation of two thousand gallons about the middle of the year, and later in the year another tank of around 12,000 gallons capacity. I believe.

[fol. 5042] They used the 2,000 gallon tank which they put in the middle of the year in production, also.

High speed copper was a success at Cadillac almost from the beginning. Insofar as our sales of material to them are concerned, we sold them our 96 per cent high test sodium cyanide, which is essential to its operation.

We sold them the addition agents but we were not able to sell them the copper anodes, which in all cases represented very substantial dollar volume in the plating business.

In 1939 Cadillac installed several additional semi-automatic machines for high speed copper plating, and continued through 1940 to use the process quite successfully.

Despite our difficulties in trying to sell them high speed copper anodes, as we called our particular copper anodes, we did get an agreement on the part of Mr. Jack Bunch, who

was plating superintendent, that if the claims that we made for our anodes being superior to the competitive ones could be proven, he would buy them, and he did buy them after a trial.

We sold Cadillac, then, most of the ingredients and anodes that went into these baths through 1940.

In 1941 there was an additional expansion of high speed copper plating, this all being brought about by greater demand for thicker plates. However, in doing this, they ran into some trouble. They had had some troubles corrected by technical service prior to that time, even, but they also were using products of Hanson-Van Winkle-Munning Company for part of their production.

As with any good development of this sort, no matter what head start you have, competition starts very early [fol. 5043] thereafter, and we were getting plenty of competition by 1941.

Hanson-Van Winkle-Munning was the first one to induce Cadillac to make a trial of a competitive process.

Through the war years there were no cars produced, and Cadillac merely kept their solutions in standby condition. After the war it became very evident that very much heavier deposits of plate would have to be put on all exterior car parts because, on the cars which had gone through the war, the finishes had not stood up too well, and corrosion was very apparent.

Cadillac made the decision to increase their copper plating facilities to an even greater extent; and they did put in additional equipment for this purpose. They continued to use our process largely, but they also continued to operate a production solution of Hanson-Van Winkle-Munning's process.

In 1947 one of the large du Pont semi-automatic solutions was converted to the MacDermid process, when they encountered some roughness. But Cadillac continued experimenting right along with ways and means of improving all types of copper plating.

In 1948 additional units were put in. Cadillac's car production was increasing considerably, and being a quality product they were not concerned about the amount of copper solution they installed. They wanted to get lots of it, and they put in additional du Pont copper.

Later they modified one of our solutions with MacDermid

addition agents and also the addition agents offered by the WICO Company, the Wire Coating & Manufacturing Company, another competitor.

[fol. 5044] They continued to operate the WICO process for awhile, but it proved to be entirely too costly. The addition agents—the consumption of them—was way out of line with our addition agents, and they rejected WICO copper and went back to du Pont Copper.

In 1949 they started tapering off on their trials of competitive materials, still continuing to use lots of du Pont copper, and finally in 1950 they discontinued all trials of competitive products—all of them had been tried and all of them found wanting to some extent—and du Pont copper was in at Cadillac completely.

Mr. Ragland: In order to complete the Cadillac story, I would like to offer in evidence Defendants' Exhibit DP 373, which is a technical service report, dated April 25, 1939, by Mr. F. F. Oplinger.

(Said document so offered and received in evidence was marked du Pont Exhibit No. 373.)

By Mr. Ragland:

Q. Who was Mr. Oplinger?

A. F. F. Oplinger was assistant manager of the Electroplating Division. He has since died.

Mr. Ragland: I would like to read the last paragraph at the bottom of page 1, and the short paragraph at the top of page 2:

"During the past month they have spent considerable time and money obtaining cost data on the various bright nickel plating processes as well as on High Speed Copper. Mr. Bunch—"

[fol. 5045] Mr. Bunch is shown by the report itself to be Cadillac's superintendent of plating.

"—Mr. Bunch claims that the data is as accurate as it was humanly possible for them to get it. According to the final results the cost of plating 0.001" of copper with the High Speed process including anodes, current, chemicals for replenishing and for cleaning and pickling was found to be 1.1 ct. The cost of bright nickel plating was found to be 2 cts. /0.001"/SF. As a result of their cost studies, it is entirely possible that

they may discontinue the present method of bright nickel plating and substitute another."

Then at the top of the other page:

"The important fact is that they have found High Speed Copper plating to cost only one-half as much as bright nickel plating. This most certainly indicates that there will be a definite increase in the amount of copper used and a decrease in the amount of nickel."

I think this would be a convenient place to recess.

The Court: The court stands recessed for fifteen minutes.

(Recess taken.)

The Court: Proceed.

Mr. Ragland: The witness will now discuss only one each of the car and non-car divisions that are shown on the chart, but in both instances he will discuss the two most important; that is Chevrolet for the car divisions, and Ternstedt for the non-car divisions.

[fol. 50] By Mr. Ragland:

Q. Take up Chevrolet first, if you will.

A. Well, as in the situation of case hardening, each Chevrolet plant has a different problem and makes its own decisions and does its own purchasing. Consequently we had to discuss high speed copper plating and the prospects of using it at each of the plants. Not all Chevrolet plants do plating, but one of the most important reasons for the interest in Chevrolet is that they make more cars than anyone else within the General Motors Corporation, and consequently have the biggest potential market for our products.

It happens that Chevrolet has always followed the practice of plating substantial quantities of nickel with very little copper. They use a copper strike to a certain extent, but at Chevrolet Flint, for instance, where they manufacture, or they did at this time manufacture, grilles for all of the Chevrolet cars and many other parts, they were using steel grilles and plating primarily with nickel.

At the time we introduced high speed copper in 1938 several of the Chevrolet plants began to show an interest in high speed copper, but no installations resulted from it, at least in that year.

The following year, 1939, however, the war was just be-

gining in Europe, and there was a serious shortage of numerous materials developing in this country; one of which was nickel—in great demand for alloy steel and that sort of thing—and consequently Chevrolet was unable to get all of the nickel they wanted. They began to take a serious look at high speed copper at that time, and when we learned that Chevrolet might make an installation of high speed copper, Mr. Oplinger, whom I previously mentioned, [fol. 5047] and H. W. Kennedy, one of our service men in Detroit, and I called on Chevrolet Flint—on Mr. A. G. Spencer, their metallurgist.

We found him quite agreeable to a trial of high-speed copper because they needed something to replace the heavy deposit of nickel they were putting on there. They did order the materials and install a 13,000 gallon solution, I believe, which performed quite satisfactorily, but for some reason they only continued to run it for about two months. We have never been completely satisfied that we knew the reasons why they discontinued it, but they gave us as reasons that the equipment which they were using was not suitable for high speed copper and that they had meanwhile found ways and means of preparing the steel in such manner that they could put nickel on it and buff it.

After that they took high speed copper out and put nickel back in. We never did get that business back again.

At Chevrolet Gear and Axle and Saginaw Transmission Division they did considerable plating, but neither of those plants ever put in high speed copper.

Just before the war, however, and still due to the nickel shortage, they began to experiment with an acid copper process. Actually it was the General Motors Research acid copper, and it was adopted for part of the work. They used that to replace the nickel.

During the war years, of course, they didn't do any plating to speak of except on some miscellaneous war work, but after the war Chevrolet went right back to plating heavy deposits of nickel. They never have changed that [fol. 5048] procedure until recently when they ran into nickel shortages again, and have put in the MacDermid process for copper plating.

The Bay City plant started the manufacture of die castings for hardware after the war, and we learned through Mr. Huffman of the Chevrolet Gear and Axle that they

were going to install copper plating. Naturally, this was another good opportunity for us, and we immediately went to see Mr. Ecker who was the metallurgist at that plant, to try to induce him to put in high speed copper. However, he did contemplate the possibility but didn't install it. He actually put in the Unichrome process which I mentioned is the pyrophosphate bath, and completely competitive to anything we had to offer.

They have had trouble with Unichrome over the years since that time, but despite these troubles we have never been able to induce them to make a trial of high speed copper or install it.

High speed copper was tried at Chevrolet Cleveland, and the plant at Saginaw in 1949, but that was primarily for defense work.

In neither plant did we get the high speed copper installed. The only high speed copper solution that Chevrolet ever used was one put in at the Buffalo plant, and that was of very little significance compared to the potential copper business that could have developed at Chevrolet.

The Buffalo plant has had nothing but complete success with high speed copper, and they like it particularly because they know the laboratory is nearby, at Niagara Falls, and they can get assistance if they need it.

[fol. 5049] By Mr. Ragland:

Q. Now, will you drop down to the seventh division on the chart, Ternstedt, which I believe you said was the most important of the non-car divisions from the standpoint of electroplating?

A. Yes.

Ternstedt is a major manufacturer of hardware and other parts for the GM car divisions. They have always done a lot of plating of all types, and they have also been one of the most difficult divisions of General Motors for us to sell anything. They operated the standard cyanide process, a standard cyanide copper process, up to 1938, and were the second of the General Motors divisions to install the du Pont high speed copper solution.

This was done in July of 1938 on an experimental basis, and later in the year they put in a larger installation—I think it was in their plant 16 for the plating of die castings. This is in Detroit.

We thought that Ternstedt would be an ideal market for

high speed copper, because of the particular nature of their plating. They weren't after heavy deposits. They wanted to plate a fair amount of copper rapidly because most parts that Ternstedt made were interior parts, and that would be ideal for high speed copper, particularly on die castings.

In 1939 they installed at the Fort Street plant, where they were plating primarily steel parts, another du Pont high speed copper solution.

We were encouraged in our efforts to sell Ternstedt through other General Motors people such as Mr. Phillips from the General Motors Research Laboratories, and by [fol. 5050] the people of Cadillac who had done some demonstrating of plating for Ternstedt on their own parts. They continued to use some of our high speed copper for 1939 production, the production of 1940 car model parts, although this was not by any means all of the copper plating they did.

In 1940 they got a new tank, a new piece of equipment, which they thought was ideally designed for high speed copper, and installed it at the Fort Street plant for plating of steel parts.

Well, during this period, Ternstedt bought very little from us, despite the fact they were using some of our processes. Ordinarily when you develop a process you expect to sell your goods to go with it. Ternstedt had been buying foreign sodium cyanide—that is the French material purchased from the importers—and even when they put in high speed copper at first they elected to use some of this and copper cyanide instead of putting in salts designed for this purpose.

We did sell them some salts, but not much, by any means. We never did sell them any copper anodes. We sold them some addition agents. Ternstedt had a policy which they often expressed to me and other salesmen from our department who called there, about buying from local suppliers wherever they possibly could. That meant if anyone in Detroit had the equivalent to offer of what we had operating out of Chicago at that time, that the Detroit suppliers were going to get the business, and that is exactly what did happen.

In 1941 Ternstedt discontinued our process stating that [fol. 5051] it just wasn't doing the work they expected of it, the equipment was not designed properly for it, despite

their original contention that it was, and they at that time began converting all of their solutions to GM's acid copper process.

We learned also that the Fort Street plant was having some trouble on plating of diecastings, and tried to induce them to transfer the solution which had been discarded for use on steel at Fort Street, over to this plant 16.

I said "Fort Street" before, but I meant "Plant 16."

They declined to do this, and we just never got any more high speed copper business at Ternstedt.

Postwar, the situation remained the same. They continued to operate GM acid copper and the Hanson-Van Winkle-Minning competitive cyanide process exclusively. We had sold them some sodium cyanide—that is the high test—because when the war started they couldn't buy it anywhere else, but now there is again imported cyanide available, and they are actually using some of that.

Mr. Ragland: Now, I offer Defendants Exhibit No. DP 374 which is a technical service report, dated June 10, 1941, by H. W. Kennedy.

(Said document so offered and received in evidence was marked du Pont Exhibit No. 374.)

Mr. Ragland: I wish to read only the first paragraph, and the first sentence from the second paragraph.

By Mr. Ragland:

Q. I believe you said that Mr. Kennedy was one of your salesmen?

A. Technical serviceman located in Detroit at that time. [fol. 5052] Mr. Ragland: (Reading):

"I called here today at the request of Mr. Cole—who was shown by the report itself to be the chemist at Ternstedt—

"—to inspect their Zin-O-Lyte operations."

By Mr. Ragland:

Q. What are Zin-O-Lyte operations?

A. Zin-O-Lyte is a trade name for one of our zinc cyanide processes.

Mr. Ragland: (Continuing):

"however, while I was in the lobby, Mr. Hidley called

me in and told me that they wished to return 1100 pounds of RH 553 and 4 gallons of RH 556."

By Mr. Ragland:

Q. What are those, RH 553 and RH 556?

By the Witness:

A. RH 553 was our designation of the du Pont high speed copper plating salts from which the bath is made up; RH 556 is an addition agent for that bath.

Mr. Ragland: (Continuing):

"I told him that this sounded as though they intended to discontinue High Speed Copper operations. He said he did not know anything about it.

"I mentioned this to Mr. Cole and he said that they installed the second full automatic machine of General Motors Research Acid Copper last week-end and consequently cut down on their High Speed Copper."

[fol. 5053] By Mr. Ragland:

Q. The High Speed Copper that they cut down was du Pont?

By the Witness:

A. That's right.

Mr. Ragland: This chart and the testimony, the chart entirely and the testimony of Mr. K'Burg largely, deal with copper plating which he has stated is the most important to du Pont of the various plating operations. However, so that this record will be complete, I now wish to ask Mr. K'Burg a few questions about the other types of electroplating—zinc, tin and cadmium.

By Mr. Ragland:

Q. Do you have items to sell for those?

A. Yes, we do. We manufacture chemicals which are used in all three.

Q. Did du Pont acquire this business from R&H, too, or did it develop it itself?

A. Both. R&H had several processes which it had developed on its own, and subsequent to the acquisition, we have developed a couple of processes.

Q. Did General Motors purchase any of their requirements in this line from R&H before du Pont acquired it?

A. I am sure they must have.

Q. Did the transfer of the R&H business to the du Pont Company effect any change that you know of in the commercial relations?

A. No.

Q. As to the new processes which your department subsequently developed, did you offer them first to any General Motors Division?

A. No. The "Durobrite" zinc process was first tried by the Buffalo Bolt Company in North Tonawanda, New York. They manufactured plated parts for the automotive industry in their plant near Niagara Falls. It was a very good place for an installation to be made. It was a very satisfactory installation, and they still use it to this day.

My recollection concerning the automotive industry is that our first installation was at the Ainsworth Manufacturing Company in Detroit which made parts generally for the Ford Motor Company.

Q. Which General Motors Division do most of the zinc, tin and cadmium plating?

A. Chevrolet does the largest amount of zinc plating. Cadillac, Ternstedt Division, and Frigidaire all do some.

Q. How about Delco-Remy?

A. Delco-Remy does a fair amount of zinc plating. They do zinc, tin, and cadmium.

Q. Testify very briefly about Chevrolet, if you will.

A. Chevrolet at the Gear & Axle plant does most of the zinc plating for the Chevrolet Divisions. They have never used our process. We have sold them 96 per cent sodium cyanide—our high-test product—for this purpose, and occasionally some zinc cyanide, which they buy on a competitive basis.

When our price was low, we got the business, and when it was not, we did not. They have never used any of our addition agents. At one time, we sold them some zinc anodes also on a competitive basis, and we didn't get much on that basis.

Q. I believe you said that Frigidaire was one of the non-car divisions that was important in this line. Does Frigidaire buy its requirements from you?

A. Frigidaire used to buy substantial amounts of sodium cyanide from us, from R&H, then later from du Pont. However, we have tried to sell them zinc anodes without success.

Q. Now, finally, take up the Delco-Remy Division, which I believe you said was the other important one, especially as far as zinc plating is concerned?

A. Yes, Delco-Remy before the war did a fair amount of zinc plating, but not as much as it has done since.

Before the war, they bought some of their chemicals from us, but they did not use our "Durobrite" process. Since the war, we have been quite successful in selling them our process and "Durobrite" conditioning agent. We have never been able to sell them the zinc anodes.

Q. Have you tried to sell each of the General Motors divisions about which you have testified, including those that had other forms of plating and those that are listed on the chart, have you tried to sell each one of them a greater portion of their electroplating requirements than you have been able to do?

A. Yes, we have always tried to sell General Motors divisions everything we had to sell that they could use.

Q. Has there been any exception at all to that?

A. No. Except I recall at one time being so unsuccessful at Buick that I went to my superior, my district manager here in Chicago, and I said we were getting nowhere fast, and we should not even bother to call any longer.

He said, "No, you had better keep on calling," and we did and finally got some business.

Mr. Ragland: In completion now of Mr. K'Burg's testimony [fol. 5056] many concerning electroplating, I wish to offer in evidence a few of the reports which supplement his oral testimony, and confirm certain statements made in the electroplating charts concerning the divisions, not covered in detail in Mr. K'Burg's oral testimony.

I will not read any of them.

The exhibits start with du Pont No. 375, which is the third item after the second chart.

Mr. Ragland: Defendants' Exhibit No. DP 375 is a technical service report of H. W. Kennedy, dated October 1st, 1940.

(Said document, so offered and received in evidence, was marked du Pont Exhibit No. 375.)

Defendants' Exhibit No. DP 376 is a master report by H. W. Kennedy and R. R. Bair, dated January 2, 1941.

(Said document, so offered and received in evidence, was marked du Pont Exhibit No. 376.)

By Mr. Ragland:

Q: You have previously told us who H. W. Kennedy is. Who is R. R. Bair?

A. R. R. Bair is a chemist in our Niagara Falls Laboratory in charge of service.

Mr. Ragland: The next exhibit is Defendants' Exhibit No. DP 377, which is a technical service report of F. F. Oplinger, dated September 6th, 1939.

(Said document, so offered and received in evidence, was marked du Pont Exhibit No. 377.)

[fol. 5057] Mr. Ragland: The next is Defendants' Exhibit No. DP 378, which is a technical service report by H. L. Benner, dated May 29, 1945.

(Said document so offered and received in evidence was marked du Pont Exhibit No. 378.)

By Mr. Ragland:

Q. Who is H. L. Benner?

A. At that time, H. L. Benner was the technical service representative in Detroit.

Mr. Ragland: Next is Defendants' Exhibit No. DP 379. It is a routine trade report of Mr. K' Burg dated May 8, 1941.

(Said document so offered and received in evidence was marked du Pont Exhibit No. 379.)

Mr. Ragland: The next is Defendants' Exhibit No. DP 380, this being a routine technical report by Mr. Hill whose initials are not shown on the report.

It is dated March 31, 1949.

(Said document so offered and received in evidence was marked du Pont Exhibit No. 380.)

By Mr. Ragland:

Q. What are Mr. Hill's initials, and who is he?

A. His initials are D. W. He is a technical service representative in Western Michigan.

Mr. Ragland: The next is Defendants' Exhibit DP 381; which is a letter from Mr. K'Burg to P. R. Lindsay, sales [fol. 5058] manager of the sodium products division, dated August 17, 1949.

(Said document so offered and received in evidence was marked du Pont Exhibit No. 381.)

Mr. Ragland: And finally, Defendants' Exhibit No. DP 382, which is a routine trade report of R. C. Schuler, dated November 19, 1947.

(Said document so offered and received in evidence was marked du Pont Exhibit No. 382.)

By Mr. Ragland:

Q. Who is R. C. Shuler?

A. R. C. Shuler at that time was a salesman in Detroit.

Mr. Ragland: Just as I did in the case of the other chart, I now, having completed Mr. K'Burg's oral examination, and having offered these trade reports, wish to offer in evidence the electroplating chart which has been marked for identification as Defendants' Exhibit DP No. 372.

(Said document so offered and received in evidence was marked du Pont Exhibit No. 372.)

Mr. Ragland: I would like to ask you just a few general questions to complete your testimony, Mr. K'Burg.

Have you ever been advised by anyone that there is an agreement between du Pont and General Motors which requires General Motors to buy from du Pont any part of its needs of products which your department sells?

A. No, I have not heard of it.

[fol. 5059] Q. Have you ever heard of any conspiracy under which General Motors is required to buy from du Pont any of the products which you sell?

A. No, sir.

Q. Finally, to your knowledge, has the fact that du Pont owns stock in General Motors been used in any way to sell any of your products to any General Motors division?

A. No, sir, it has not.

Mr. Ragland: That completes my examination.

Cross-examination.

By Mr. Harsha:

Q. Mr. K'Burg, you have testified principally about the case hardening materials, and electroplating, and high speed copper plating processes and chemicals which you sold to General Motors, among other car manufacturers. Are those two types of chemicals the principal chemicals which you sell, and by you, I mean the Electrochemicals Department of duPont, to General Motors?

A. Yes, sir.

Q. This accounts for the bulk of your sales to GM, in your department?

A. That is right.

Q. Now, I would like to ask you a few questions about this case hardening process or processes, rather.

You mentioned this gas carburizing process which came in, I gather, some time in the middle thirties or late thirties.

A. Well, I think the late thirties would be better.

Q. Was that a rather expensive process to convert to?

A. Yes, it was.

Q. For an automobile manufacturer?

A. For the installations which were being considered at that time, it was quite expensive. Since most of these large [fol. 5060] installations have been made, there have been some smaller, less expensive installations put in.

Q. Would it be true to say that those who have gone to the gas carburizing process have been those who were the largest units in the automobile industry?

A. Yes.

Q. Now, I would like to ask you a few questions regarding this DP 362.

This is an excerpt from the survey made in 1937.

Now, I gather from your testimony regarding this chart that in many instances at least the figures shown here are estimates rather than actual sales figures, or figures that you saw in the customer's hands, is that right?

A. That is right, yes.

Q. I mean you were estimating what their requirements were?

A. That is right.

Q. And I note that the largest purchaser of your products among the units outside of General Motors is Ford Motor Company in 1937. Isn't it true that at that time the Ford Motor Company was going to this gas carburizing process?

A. They were starting to test it.

Q. And at the time you prepared this survey, you knew that didn't you?

A. I found that out during the survey.

Q. Yes. As a matter of fact, didn't Ford go to that process in the next few years?

A. They did in part, but they had never gone all the way.

Q. Well, proportionately, how much of their case hardening is done by the gas carburizing process, say, today, do you know?

A. No, I don't. First I cannot determine how you can measure the gas hardening process in the same terms.

[fol. 5061] Q. I gather also, just to make clear in my own mind, that this chart does not purport to show just automobile manufacturers who are using the gas carburizing process, is that right?

A. That is right.

Q. So that some of the units that are shown here, some of the automobile units that are shown here, from your own general survey, would appear to be small users of the various types of cyanide manufactured by du Pont, or competing processes manufactured by people like Holden, but may in fact be very large case hardeners, if I can use that term, who use the gas hardening process, is that right?

A. Well, for 1937, most of these figures look quite substantial.

Q. Well, isn't it a fact that the Saginaw Steering Gear Works of General Motors at that time was using gas carburizing?

A. In 1937, I think they were probably just starting to use it. I do not think any extensive use was being made of it at that time.

Q. How about Chevrolet Gear? Were they using the gas carburizing process then?

A. They were not really using it. No one was really using it in 1937. It was still on an experimental basis.

Q. Now, I gather that the standard material of case hard-

ening at the time you went with the R&H Company in 1929 was the cyanide process, is that right?

A. Yes, sir, and pack hardening.

Q. And then in the early 30's, there were demands among certain of the manufacturers who were doing this case hardening for a product which would have a deeper case, isn't that right?

A. Yes.

Q. Deeper than that provided by the cyanide process?

A. Yes, a product which would put on a deeper case.

[fol. 5062] Q. Yes. Who was the first one to come out with that type of process, do you recall?

A. Yes, the American Cyanamid Company.

Q. That was "Aerocase"?

A. Yes, sir.

Q. How about "Perlton", did that come out about that time?

A. A few years later.

Q. And du Pont's "Ducase", I gather, was produced later to meet that type of competition, is that right?

A. No, "Ducase" was developed about—I should say probably prior to "Perlton", but subsequent to "Aerocase".

Q. After "Aerocase"?

A. That is right.

Q. Do you have Exhibit DP 363 there? I think that perhaps we may have to use both in conjunction because they somewhat overlap.

Now, I believe you indicated on your direct that the Buick Motor Company was about the next largest car unit of GM, in terms of this case hardening process?

A. That's right, yes, sir.

Q. Drawing your attention to DP Exhibit No. 363, you note a statement that they commenced displacement of liquid hardening with the gas process in 1936. That was a year before you made this survey, is that right?

A. That is right.

Q. And by 1937, would you say they were substantial users of this gas carburizing process?

A. No, I would not say they were. They were continuing these experiments which, incidentally as I recall it, were not successful at first. They were still using liquid baths in 1937.

Q. What I am trying to find out is, did you lose any business in your sales to Buick because of this gas carburizing process in about 1937?

A. No, we did not. We were not selling to Buick.

Q. How about your Saginaw Steering Wheel? Were they using the gas carburizing process rather extensively in 1937?

A. No, sir. I think I should say that no one was using it extensively prior to the war.

Q. Do you have records in the Electrochemicals Department of du Pont which indicate the percentage of the customers' requirements which were being supplied by the du Pont Company in say the last ten years?

A. Not that way. We have our trade reports in which the salesmen always report in terms of pounds to show both our sales and our anticipated sales and competitors' sales.

Q. Do you know what you are selling to the Ford Motor Company today in the way of this cyanide process?

A. Yes, we are selling a substantial quantity of 96 per cent sodium cyanide to Ford Motor Company today.

Q. How would it compare to the figure you show for 1937?

A. It is not nearly as large as that.

Q. Well, what I am trying to find out is how much of a drop has there been, roughly?

A. Well, the Ford Motor Company, on this chart—

Q. Bought 1,300,000 pounds?

A. I think I had better break it down. They bought 50,000 pounds of the 96-98 per cent sodium cyanide. That is the product that we are selling them today in substantial quantities.

Q. You say in larger quantities than shown here?

A. Yes, considerably more than that. I would say it would probably run 300- or 400,000 pounds. Of the 75 per cent sodium cyanide—in there, it shows 850,000 pounds. We are selling them very little today, probably not even 100,000 pounds.

[fol. 5064] Of the 45 per cent sodium cyanide—the chart shows 450,000 pounds. I do not think we are selling any of that today. Most of our sales to the Ford Motor Company happens to be 96 per cent high test cyanide.

Q. Now, in this 362, du Pont Exhibit 362 which you have

there in your hand, can you tell us roughly what the dollar volume of those sales would amount to? Take for example, the total shown under General Motors total sold by du Pont, 482,000 pounds.

Can you translate that roughly into dollars?

A. It will be rough.

Q. Well, your best estimate.

A. About \$50,000.

Q. Now, you have mentioned this "Ducase" process that du Pont brought out. Was that brought out at the time you made this report in 1937?

A. We were trying to promote its use.

Q. Was it in general use at that time?

A. No, sir, it was never in general use.

Q. It was never in general use?

A. No.

Q. I believe you said something to the effect that it was not the complete answer to the type of case hardening requirements of many large customers, is that right?

A. That is right.

Q. Isn't it true that that was supposed to be your answer to the competition afforded by "Aerocase" and Holden?

A. It was for "Aerocase," but not for the Holden product.

[fol. 5065] Q. What was your answer as to that competition?

A. We later brought out two different products which we called du Pont accelerated salt and du Pont carburizing salt. That was afterwards.

Q. That was after this report was made?

A. Yes.

Q. Many years after, was it, roughly?

A. Probably a year, more or less.

Q. So that as a matter of fact, the "Perlton" and "Aerocase"—that is the "Perlton" process or Holden—du Pont did not have any product that was equal to it in quality at the time this survey was made?

A. I think that is a matter of opinion, sir. "Ducase" could have been used for that purpose.

Q. Yes. Didn't the survey that you made about this time

indicate that there were serious drawbacks to the du Pont process as then evolved?

A. No. The survey was made primarily because we knew there was a growing need for it. That was the real reason for the survey. We were trying to develop, or produce, a deeper hardening bath which would answer this question, not only in the automotive trade, but everywhere.

Q. What I am trying to determine here, as near as I can, and I hope in nontechnical language at the time you made this survey, isn't it true that du Pont didn't have a case hardening material which was equal to the quality then existing in such competitive products as Aerocase and Perliton?

A. I don't want to get technical here.

Q. Well, let me put it this way—

A. I think I can answer your question all right. If you get [fol. 5066], the carbon in the steel, which is the end purpose of case hardening, and can do it by Aerocase, "Ducase", or Holden or cyanide or anything else, then you have your process.

Now, your choice of process would not necessarily be the measure of quality of any one of these products. There may be other characteristics which are objectionable or desirable.

Q. Well, I note that in this report that you made at that time that the statistics were taken from, you made this statement on the second page of your report that there appear to be two limitations to the cyanide bath, and I presume you are referring there to the process that the du Pont Company was selling the materials for?

A. May I take a look?

Q. Sure.

A. Well, it describes the result which can be expected from any sodium cyanide bath. You can obtain 6 thousandths of an inch. To get more somebody would have to bring out a new bath or you would have to run your cyanide bath in an uneconomical way. You could actually go on to 8 thousandths or 15 thousandths in the cyanide that was being made then if you ran it a little longer. The idea was to cut down the time, and that was the reason for the deeper hardening bath.

Q. That is right. At that time, your product was not as fast in its operation—isn't that correct—as some of those then on the market?

A. That is an inherent characteristic of sodium cyanide.

Q. Just to make sure I have these products straight then, "Ducase" was not really in commercial usage in 1937, [fol. 5067] at the time you made this survey?

A. No, we had one or two small users of it. As a matter of fact Burroughs Adding Machine Company used "Ducase" for a long time after this survey was made. I don't believe it was even mentioned that Burroughs was using "Ducase" in that sheet, although it may have been.

Several other small companies were using it. The drawback to "Ducase" was exactly the same drawback as the "Aerocase" had. I might mention concerning this we still sell a lot of these grades of sodium cyanide for casehardening today.

Q. Yes, I gather that. It is true, you did predict in this survey, quite a substantial loss of the du Pont sales of the cyanide, projected over the subsequent two or three years, isn't that right?

A. That's right.

Q. And was your information on your forecast substantially borne out by events?

A. No, I didn't forecast the war along with it.

Q. I see. That changes the picture?

A. Yes, that changed it entirely.

Q. But after the war, would you say you became a better prognosticator?

A. Well, gas furnaces continued to be installed. There are several interesting things that developed as a result of all of this. We started out then to try to sell more sodium cyanides in a number of plants, and also these activated type baths that I mentioned.

The net result of that was that we found many concerns who had been sold on installing the Houghton and Holden processes who should never have put it in at all, and some actually went back to the use of our sodium cyanide. That [fols. 5068-5069] is the reason we maintained our position on sodium cyanide.

Adjournment.

[fol. 5070] Cross-examination (continued).

By Mr. Harsha:

Q. Mr. K'Burg, we were discussing the cyanide case hardening materials yesterday, and I have a few additional questions with respect to them.

Directing your attention to, say the mid-30's, prior to the beginning of World War II, can you tell me whether there were any differences in the results obtained between the cyanide sold by the du Pont Company and the cyanides which were imported during that period?

A. No, there would be no substantial difference. In fact, practically none.

Q. Do you know whether there was any difference between the two types of cyanide, the imported and du Pont in terms of price?

A. Yes, there was.

Q. Can you tell me what the difference was?

A. Well, the imported material was less expensive.

Q. Was it appreciably less expensive?

A. I think it sold generally for about one-half to about one-cent a pound less for our equivalent material.

Q. One-half?

A. One-half to one cent per pound less than our equivalent material.

Q. And this cyanide sold for roughly what?

A. In that period?

Q. Yes.

A. I think our price was $16\frac{1}{2}$ cents a pound.

[fol. 5071] Q. And the imported, you would say, would be 16 or $15\frac{1}{2}$, something like that?

A. That is right.

Q. Now, are you in a position to know what proportion the du Pont Company, say, in 1947 and 1948, was supplying to the various General Motors units of their requirements for those sodium cyanides for case hardening?

A. Well, in 1947 and 1948, there was no imported material available. We had to supply it all.

Q. You were supplying all?

A. That is right, of the 96-98 per cent sodium cyanide.

Q. That is an important use today for sodium cyanide, isn't it, in the automobile industry?

A. That is right.

Mr. Harsha: Do you have Mr. K'Burg's 1937 report there, the survey, the photostatic copy?

Now, you might also show Mr. K'Burg, if you have it handy, DP Exhibit 362 which is the statistical material which was prepared from Mr. K'Burg's report in 1937.

And I note in the grouping of the GM units that the General Motors Truck is shown as buying its—well, 2,000 pounds of the 96 per cent sodium cyanide from du Pont and 5,000 pounds of "Aerocase."

I would like to direct your attention, Mr. K'Burg, to page 38 of this report which you made in 1937, and which deals with your report on the Yellow Truck & Coach, which I assume is the same as the GM Truck on this chart.

By the Witness:

A. Yes, it is.

By Mr. Harsha:

Q. And I note that you state:

"For many years they have operated accelerated salt [fol. 5072] baths to produce a case of greater depth than can be obtained with straight cyanide.

"2. This bath is 'Aerocase' and it was selected because at the time it was the only one of the accelerated salt baths on the market."

Then you go on to state that:

"They require case depth of about 0.018", which they produce in 'Aerocase' in about one hour. They have in the past operated pots with 'Ducase'."

By Mr. Harsha:

Q. And that is the du Pont material, isn't it?

A. Yes, sir.

Mr. Harsha: (Reading):

"And with Perliton, but decided not to use the former because it proved to be more costly in operation than 'Aerocase' and the latter had no advantages over 'Aerocase' in any respect. They state that they were well pleased with the operation of 'Ducase' and might have continued with it except for the expense involved."

By Mr. Harsha:

Q. Wasn't this the reason why General Motors Truck was using "Aerocase" rather than du Pont sodium cyanide or "Ducase" at this time?

A. Yes, that is what it says.

Q. Now, I would like to direct your attention to the chart. It shows that Chevrolet Bay City was purchasing 100,000 pounds of the 75 per cent sodium cyanide from du Pont, and 5,000 pounds of the Holden material.

[fol. 5073] I direct your attention to page 29 of your report of 1937.

The Court: What is the number of that exhibit, please?

Mr. Harsha: Your Honor, this exhibit is not in evidence. It was foundation material for du Pont Exhibit 362, and I asked for a copy of it, and counsel provided it for me.

Now, you will note there that the statement is made:

"du Pont 75 per cent Cyanide-Chloride Mixture continues to be used here for practically all operations except the hardening of the Chevrolet speedometer gear on which they find they require a deeper case than can be produced with cyanide.

"2. For the speedometer gear operation they use Holden's Light (?) Case for the reason mentioned above."

By Mr. Harsha:

Q. Isn't this also the explanation in this instance why Chevrolet Bay City Division was purchasing the Holden material?

A. In 1937, yes, although they could have used "Ducase".

Q. But you do make the statement that they required a deeper case than could be provided by cyanide, and I presume you mean there in a reasonable length of time.

A. That is right. Time is an important factor.

Q. Then with respect to Buick, I note as shown on this chart Buick purchased 300,000 pounds from Holden. If you will refer to page 32 of your report—I guess it begins on page 31, you have the statement, and I quote:

[fol. 5074] "We have been given to understand that for most of the operations Buick has conducted in salt baths during the past few years Sodium Cyanide had no particular limitation. For speedometer gears, however, they found that better results could be obtained with a deeper case produced thru the use of deep hardening salt baths."

Then on the next page, the statement was made at the end of paragraph 2:

"Holden's light case has been used here in very large quantities."

Then you mentioned that this operation was formerly carried out in a bath made up from 40 per cent sodium cyanide so that this was not the situation where you had lost Buick, isn't that correct?

A. We had not been selling anything to Buick in that period.

Q. And I gather also from the rest of your statement in paragraph 2, that the Holden materials had been one of the first of the accelerated case hardening materials being introduced into this industry, is that right?

A. Well, I think the situation is as I mentioned it in direct examination that Holden and Park came out with an accelerated type salt about the same time, and that followed "Ducase" introduction, and then very shortly after

that we came out with our salt baths in addition to "Ducase."

Mr. Harsha: Then on the next page, on page 32, you state:

"On speedometer gears 'Parkcase' is being used and [fol. 5075] is producing very satisfactory results. In this instance they wished a deeper case than could be obtained thru use of cyanide."

By Mr. Harsha:

Q. There, again, is the explanation for Buick turning to Parkcase in this particular instance, isn't it?

A. That is right.

Q. Now, isn't it true, Mr. K'Burg, that if you contrast the du Pont cyanides that you were producing, say about this time in 1937, with the products which were then sold under the names of, say, "Aerocase" and "Perlitor" and "Parkcase"—if you contrast those two groups, isn't it true that you would find that they are not wholly comparable in terms of the results which can be obtained through their use, as case-hardening materials?

A. Well, I think that is a safe general statement. I think it could be qualified to the extent that these competitors, Park Chemical and Houghton, had a much greater interest in selling a compounded product, containing sodium cyanide, rather than straight sodium cyanide.

In fact, they rarely sold that. One of the things we uncovered as we went about our business of trying to sell our accelerated salts in competition with them, was the tendency to oversell these products and that many people were using them simply because they were oversold, and many of them went back to the use of straight cyanide.

On the other hand, there were places where some deep hardening was required, and that was the purpose of the survey, to determine whether we should go into that business.

[fol. 5076]. Q. Yes, and where a user had a requirement for a deeper type of case and wanted it speedily, then the du Pont cyanides at that time, as contrasted with the "Parkcase" and the "Aerocase" and so on, would not produce the same results?

A. Well, if you except "Ducase"—"Ducase" was in the market before "Perlton" and "Parkcase" and those materials, but not before "Aerocase."

Q. Now, I would like to turn for a moment to this copper plating, high speed copper plating.

Do you have the du Pont Exhibit No. 372 there?

This is the "canned" résumé, shall we say, of your testimony, I believe, and I believe in your direct examination you were asked to describe, you might say, the history of operations in three of the General Motors plants.

The first one was Cadillac, and if I follow the notes that have been made on this document, it is true that over the years du Pont has been the major supplier to Cadillac; isn't that true?

A. Yes, sir.

Q. And then directing your attention to the Chevrolet which, I believe, you stated was the largest user or potential user, should I say, of this copper plating process, the notes indicate that in 1939 Chevrolet installed the du Pont high speed copper process, and then discontinued it after a couple of months, and in connection with that, I direct your attention to du Pont Exhibit DP 377.

I direct your attention, Mr. K'Burg, to the second paragraph of this trade report made by Mr. Oplinger. The Chevrolet-Flint referred to, I presume, is the same Flint referred to in the analysis of operations here?

A. Yes, it is.

[fol. 5077] Q. And in the second paragraph the statement is made that:

"As the plater told us when they started operations, they had some trouble with the machine which had been installed for automatic buffing of the copper, because of this, they tried the method previously used and much to their amazement found that they could polish the steel prior to plating. Because of this, the story now is that it will probably be cheaper for them to use former practice than to resort to High Speed Copper plating prior to the nickel."

Now is this the reason that was given to your salesman, Mr. Oplinger, for Chevrolet discontinuing the use of the high speed copper process in 1939?

A. I am sure that is one of the reasons.

Q. Chevrolet found, or at least in their own judgment they believed, that it was cheaper for them to go back to the earlier method?

A. Well, there is another angle to that, in so far as it applies to Chevrolet. Chevrolet followed an entirely different practice than any of the other General Motors divisions in that they had always used substantial amounts of nickel, and they had some special arrangement whereby they cast their own nickel anodes, thereby saving some money there.

That was not true of the other General Motors car divisions. But Chevrolet—I think they just had a preference for nickel plating.

Q. Now, I believe the other division that you discussed was Ternstedt, which I believe you identified as being the largest non-car unit in General Motors, in terms of potential [fol. 5078] for the use of this high speed copper, isn't that right?

A. That's right.

Q. And in connection with that, I note that here, too, in the earlier years, meaning 1938 to 1940, they are shown as having installed the du Pont high speed copper plating process, and then discontinuing it in about 1941, according to the notations here.

I believe you stated on direct that the reason that you were told, anyhow, or that du Pont was told why they dropped the du Pont process, was that it was not doing a job. Do you recall that?

A. I think I said that they found the equipment not to be quite adequate for use with our cyanide copper process.

In our opinion, both in the case of Chevrolet and Ternstedt, they could have used substantial amounts of du Pont high speed copper at all times, but of course they have their own metallurgical reasons for making decisions.

Mr. Harsha: Could you show Mr. K'Burg du Pont Exhibit 374, please?

By Mr. Harsha:

Q: I should like to draw your attention to this, and I believe part of it was read to you by counsel on direct, and I call your attention to the third paragraph where it stated that:

"Pointed out that if their shutting down of the High Speed Copper was brought about principally by the Production Department who found the acid copper finish to be so much easier to buff."

Now, that acid copper finish has reference to this process [fol. 5079] that General Motors Research evolved, hasn't it?

A. I think it is, in that case.

Q. And they could not afford to operate the high speed copper—that is the du Pont process?

A. Yes, sir.

Q. And isn't that the reason assigned to your salesman by Ternstedt for discontinuing the high speed process?

A. That is the reason they gave. I am sure that for a large share of Ternstedt's operations they could have used high speed copper satisfactorily and economically.

Q. Now, in checking over this chart, Exhibit No. 372, a resume of the operations of the various GM units from 1938 to 1950, as I analyze this chart, if we omit Frigidaire and Delco, which, according to the notations, I gather, are very small users of any kind of plating process—isn't that correct?

A. Yes, they are relatively small.

Q. And if we confine our attention to the divisions of GM which apparently do a substantial amount—I guess I should say also eliminate Buick, according to the notations.

A. That is right.

Q. So if we confine ourselves then to the divisions Cadillac, Chevrolet, Oldsmobile, Pontiac, Truck and Coach—GM Truck and Coach, I presume—Ternstedt, A. C. Spark Plug, Brown-Lipe-Chapin, and Guide Lamp.

Isn't it true that of these nine divisions that eight of

them at some time during this period covered by this chart have installed and used for some period of time the du Pont high speed copper plating process?

That is, Cadillac used it and still uses it today, I gather. Chevrolet installed in 1939 the high speed copper plating [fol. 5080] process, and discontinued it for the reasons we have just discussed.

Oldsmobile installed it, according to the notes, in 1941.

Pontiac installed it in 1940.

Truck and Coach apparently did not use it.

Ternstedt apparently has used it and then discontinued it in 1941.

A. C. Spark Plug adopted it in 1939, and Brown-Lipe-Chapin adopted it in 1938 and 1939. Guide Lamp has experimented with it and has used it, and apparently is still using it today.

So isn't it a fair statement that from the analysis of this information, Mr. K'Burg, the du Pont Company has had a greater opportunity to install its high speed copper-plating processes in General Motors units than any comparable process made by a competitor?

A. No, I wouldn't say that. When the high speed copper process was first developed, as I mentioned yesterday, it was the first one. No one knew how well it was going to catch on in the trade until some time elapsed.

After it does catch on, it is just like any other satisfactory product, someone else wants to get in the business, and it wasn't too many years following that that a good many competitors came in.

The identification of the various processes down here in the lower left-hand corner of the chart shows that we were certainly not without competition. The very fact that du Pont high speed copper stayed in some of these plants so long was due to the fact that we provided all sorts of service and assisted them to keep it in.

Q. Let's put it another way. Isn't it true that no other [fol. 5081] competitor of du Pont has been able to install its process in the General Motors units in as large numbers as du Pont?

A. Well, you really have to refer to each unit. Each unit does an entirely different job, and they approach it from an entirely different angle. You just can't generalize on it at all.

Q. Isn't one of the reasons why the du Pont high speed copper plating process has been discontinued in a number of the operations, at least one of the principal reasons assigned, is the fact that it resulted in a plating which was very hard to buff?

A. That is one of the reasons. On the other hand, a good many of these competitive processes which were tried and discontinued had the same disadvantage. The need for thicker deposits of copper is still as great now as it has ever been since the war, and there are constant developments going on, not only among our competitors, but in our own laboratories. I think we will have answers to these problems ourselves as we go along.

In the meanwhile, du Pont high speed copper is still installed in many places.

Q. I would like to show you, Mr. K'Burg, what has been marked for identification as Government Exhibit No. 1329.

I believe you identified earlier in your testimony Mr. Oplinger as being an employee of the Electrochemicals Department, is that correct?

A. Mr. Oplinger—

Q. Or was; I should say.

A. Yes.

Q. He is deceased now, I believe?

A. That is correct. Mr. Oplinger at the time was assistant manager of the electroplating division.

Mr. Harsha: I offer Government Exhibit No. 1329 at this time:

[fol. 5082] (Said document so offered and received in evidence, was marked Government Exhibit No. 1329.)

By Mr. Harsha:

Q. I direct your attention, Mr. K'Burg, to page 5 of this report, at the bottom of the page, where there is a reference to No. VIII, High Speed Copper. I presume that means du Pont process when he states:

"Our process has some very serious disadvantages."

Incidentally, this was written, according to the handwritten note, in 1946. Do you know whether that is substantially accurate?

A. Substantially—

Mr. Neitzert: What page are you on?

Mr. Harsha: Page 5.

The Witness: We have since tried to determine when it was written, and we think it was more likely first drafted in 1945.

By Mr. Harsha:

Q. Going to page 5 again of this document, I continue.

"Unless these difficulties are eliminated or greatly minimized, progress will become more difficult and further serious loss of business will result. Specific examples of such losses of accounts are as follows."

Then there is a reference to Guide Lamp Division of GM, and Pontiac Motors and Ternstedt, and then miscellaneous consumption, where he states that:

"An estimated 25,000 gals. has been lost to competition elsewhere during 1946."

[fol. 5083] Then he concludes that:

"A total of no less than 100,000 gallons has gone to competition during 1946. Further losses are anticipated unless improvements in our process are forthcoming."

Wouldn't this tend to explain some of these decisions by the General Motors units to discontinue the high speed copper plating process of du Pont?

A. No, I don't think it does at all. This report was written by Mr. Oplinger to Departmental Management, and he certainly would be very frank in his statements of his opinions of our process, and both the advantages and disadvantages of it as well as the competitive processes.

The competitive processes were not answering all the questions that needed to be answered at that time. In fact, some of these more or less pessimistic statements that Mr.

Oplinger made at this stage didn't hold good. Guide Lamp put high speed copper back in, in larger quantity.

This loss at Pontiac Motors was not a real loss because it was not a replacement. That was installed in the original equipment, at which time we had 55,000 gallons of high speed copper in that tank.

Q. I note over on page 7, he also refers to this question on buffing, in which he states that:

"—in general, high speed copper deposits cannot be buffed satisfactorily."

Then he states, in the next paragraph, that:

"Competition has used this weakness in our process [fol. 5084] quite widely. It was the primary reason for the Ternstedt Division, GMC's interest in acid copper and accounted almost entirely for the fact that they give our process no consideration."

Was that based on the reports that the du Pont Company had received from Ternstedt?

A. It would be verbal reports. You have to know exactly what you are trying to plate. Acid copper will not plate satisfactorily on some metals, and particularly metals of some designs.

Buffing is a factor in some places. The superior throwing power of a cyanide bath is much more of a factor than buffing in another place. You just can't generalize.

Q. As a matter of fact, isn't this a very highly technical field, Mr. K'Burg, in which metallurgists disagree sharply in their opinions in assessing the relative qualities of various processes?

A. That is right, but I think they generally agree that our high speed copper bath is a better bath today than anyone else's.

Mr. Harsha: That is all. Thank you.

Mr. Ragland: I have just a few more questions.

Redirect examination.

By Mr. Ragland:

Q. Mr. K'Burg, were the needs of the other customers that you testified continued to use high speed copper, any

different, in your opinion, from the needs of General Motors Divisions that switched to other processes?

A. No, sir.

Q. Did you use any different sales efforts in the case of other customers than General Motors Divisions?

A. No, we did not.

[fol. 5085] Q. Just one final question that I would like to ask Mr. K'Burg in order to bring out definitely how much money is involved in the sales and potential sales to General Motors Divisions of electrochemical products. At the beginning of your testimony, Mr. K'Burg, I called attention to the fact that Government Exhibit No. 504 indicates that during the years 1947 and 1948 the total purchases by General Motors Divisions of your department's products were averaging about a million dollars a year.

I want to ask you to make an estimate now, and I wish you would limit your testimony to the products which do not involve any switches to competitive processes. By that I mean gas case hardening and the non-cyanide types of copper plating baths.

With that limitation, would you give us an estimate of the purchases by General Motors Divisions, if they had bought their requirements of your products from you rather than buying a large part of them, as you have testified they did, from your competitors?

Mr. Harsha: Your Honor, I am not sure I understand that question, but if I do, I object to it.

The Court: I think it is too long. I will sustain the objection.

Mr. Ragland: May I start—

The Court: You may break it up into parts.

By Mr. Ragland:

Q. I wish to eliminate first of all the process idea, the switches to other processes, and just limit it to the direct [fol. 5086] competition of products where they are continuing with the cyanide type of case hardening, and continuing the cyanide type of electroplating.

With that limitation, how much annually would you sell

General Motors Divisions if they bought their requirements from you rather than a part of them from competitors?

Mr. Harsha: I would like to object to that, your Honor. I don't think this witness is in a position to give such testimony. If they have records indicating how much GM's business of these products is, I think they ought to introduce them. They are the best evidence.

The Court: In view of his familiarity with the subject, I think he should be permitted to answer.

The Witness: Well, at what time do you mean?

By Mr. Ragland:

Q. I mean in the 1947 to 1948 period, the same time that the Government figures relate to.

A. Well, I would estimate that our sales would have been in the neighborhood of three million dollars.

Mr. Ragland: That is all.

Mr. Harsha: Nothing further.

The Court: You are excused.

(Witness excused.)

Mr. Cox: If it please the Court, the testimony of the next three witnesses will relate to the subject of plastics and brake fluids. The names of the witnesses are Gillie, Walker and Weber. There are a few documents which have been [fol. 5087] supplied to your Honor in the notebook which has been handed to you.

The first witness is Leslie B. Gillie.

Mr. Gillie, will you take the stand?

LESLIE B. GILLIE, called as a witness on behalf of the Defendants, having been first duly sworn, was examined and testified as follows:

Direct examination.

By Mr. Cox:

Q. You are Leslie B. Gillie?

A. That is right.

Q. Try to speak up, Mr. Gillie. Where do you live?

A. I live in Wilmington, Delaware.

Q. Are you now employed by the du Pont Company?

A. Yes, I am.

The Court: Keep your voice up higher, please.

The Witness: I am.

By Mr. Cox:

Q. In what capacity, Mr. Gillie?

A. I am assistant director of sales of the Polychemicals Department.

Q. I should now like to direct your attention to the period of time between August 1936 and August 1948, and ask you whether you were employed by the du Pont Company at that time?

A. Yes, I was.

Q. What were you doing in the du Pont Company during that period?

A. Between 1936 and 1948?

Q. Yes.

A. I was in the plastics department in charge of the sale of molding powders.

[fol. 5088] Q. What were you doing from 1948 through, say, the end of 1949?

A. I was director of sales of the plastics department.

Q. Now, I want to direct your attention to the subject of plastics. Is there a plastic that is described as cellulose acetate?

A. Yes, there is.

Q. Has that plastic ever been manufactured by the du Pont Company?

A. It has.

Q. When did the du Pont Company start making that plastic, Mr. Gillie?

A. We started making it in 1930.

Q. Did you sell it under a trade name?

A. Yes, we did. The name was Plastacele.

Q. Was that plastic used in the automobile industry for any purpose?

A. It was.

Q. Can you tell us what purpose or purposes it was used for in the automobile industry?

A. The main purpose; the largest single use of the material was for steering wheels, for covers on metal insert of steering wheels.

Q. What quality did the plastic have that made it suitable for that use?

A. Well; it was a molding powder. It was a very easily fabricated material. It had good dimensional stability which means that it would stay put after it was molded.

It was susceptible to coloring, in many, many shades of colors, and opaque and translucent colors.

Q. Did you say its principal use was for steering wheels on automobiles?

A. I said the largest use of this material was for steering wheels.

[fol. 5089] Did anyone, other than the du Pont Company, in the 1930's, produce this plastic?

A. Yes, Tennessee Eastman Company, and the Celanese Company which was then the Celluloid Company, and du Pont.

Q. Did these other companies sell plastic under trade names?

A. They did.

Q. Do you remember what those trade names were?

A. The Tennessee Eastman Company was called "Tenite," specifically "Tenite I," and the Celluloid Company was "Lumarith."

Q. During the 1930's, did any division of General Motors use this plastic for any purpose?

A. Did they use it?

Q. Yes, was it bought and used by any division of General Motors?

A. Yes, it was.

Q. What division of General Motors bought it?

A. The Inland Division. Well, again, I am not quite clear. It was used by the General Motors Car Divisions. The steering wheels you are talking about was only manufactured by the Inland Manufacturing Company.

Q. Did the Inland Manufacturing Division of General Motors make steering wheels of this material?

A. They did.

Q. That division itself engaged in the manufacture of steering wheels, is that right?

A. That is right.

Q. Did it buy the plastic which it used for that purpose?

A. It bought the plastic.

Q. For what automobiles did Inland make these steering wheels?

A. Well, Inland made steering wheels for all makes of automobiles for all companies.

Q. You mean by that that it made steering wheels for companies other than the units of General Motors?

A. Yes, sir.

[fol. 5090] Q. Do you know whether it made all or only a part of the steering wheels used by the other units of General Motors?

A. I think they made all the steering wheels used by the General Motors units.

Q. Do you recall when the Inland Division first began to make steering wheels of plastic?

A. Yes, it was in 1937.

Q. Was that plastic a cellulose acetate?

A. Cellulose acetate.

Mr. Cox: At this point, may it please the Court, I would like to offer in evidence a document which has been marked du Pont Exhibit No. 400 for identification.

It is a schedule of sales of cellulose acetate made by the du Pont Company for the years 1937 through 1947. It will be noted that there are two columns.

The first column shows the sales to all customers, and the other column shows the sales to the Inland Manufacturing Division of General Motors for the years 1937 through 1947.

By Mr. Cox:

Q. Do you have a copy of this schedule?

A. Yes, sir, I do.

(Said document so offered and received in evidence was marked du Pont Exhibit No. 400.)

By Mr. Cox:

Q. Now, did you sell any of your acetate molding powder to Inland in 1937?

A. We did.

Q. This schedule shows that you sold "\$1,200.00 worth." [fol. 5091] A. That is right. They were just testing out and working on samples at that time.

Q. Do I understand from your answer that they were not really producing these wheels?

A. They were starting in production.

Q. Do you know whether during that year any other company sold them any of this plastic?

A. Yes, I know that they tested other materials, all of the materials during that year.

Q. Now, in 1938, the schedule shows that you sold them a large amount of plastic, in the amount of approximately \$39,000.00.

Do you know whether other companies were selling them any plastic during that year?

A. Yes, they were.

Q. What companies were selling them plastic at that time?

A. Both Tennessee Eastman and the Celluloid Company.

Q. Now, the schedule shows that sales increased to \$157,000.00 in 1939. Can you explain why that increase took place?

A. Well, as I recall it, during the two months in which we got a very large portion of the business, practically two-thirds of what we show here, because they were having trouble with the other materials for those two months.

Q. Your reference to other materials, is that a reference to these materials supplied by other companies?

A. To acetate materials.

Q. In this year, 1939, what other companies, if you know, were they buying plastic material from?

A. They were buying mostly from Tennessee Eastman and next from the Celluloid Corporation.

[fol. 5092] Q. Do you know from which of the companies involved they were buying the greater part of their requirements in 1939?

A. They were buying most of their requirements from Tennessee Eastman.

Q. Are you in a position to estimate what proportion of their requirements du Pont sold in 1939?

A. Well, I think I am. I took this job in 1939, and this was a very large potential for us, and I recall very well that we estimated that there was about a million and a quarter pounds of material to be used during that year for all of the steering wheels they were going to manufacture, so reducing it to dollars, we got about 25 per cent of the business in that year.

Q. Mr. Gillie, the schedule shows that in 1940, your sales were \$102,000.00, roughly, as against \$157,000.00 in 1939.

Can you tell us why that decrease in your sales took place in 1940?

A. Well, we began to lose out. In that year, they began using more of our competitors' materials.

Q. Which of your competitors got more business in that year?

A. Tennessee Eastman.

Q. Are you in a position to estimate what portion of Inland's requirements you supplied in the year 1940?

A. Well, I recall that we had the general idea of an increase in the number of steering wheels that they produced that year, and I estimate that we had fallen off about 10 per cent, to maybe 15 per cent, 15 or 16 per cent.

Q. Now, the schedule shows that in the year 1941, you sold \$4.00 worth of this plastic to the Inland Division, is that right?

A. That is correct.

Q. What happened in that year to your business at [fol. 5093] Inland?

A. We fell flat on our faces, that is all. We lost it completely.

Q. Were they using this plastic for steering wheels in 1941?

A. Yes, they were using it. They were buying most of it from Tennessee Eastman.

Q. Now, in the period that is covered by this table, specifically the years 1937 through 1941, at any time during that period did you make any investigations or tests to determine whether there was any difference between the quality of your cellulose acetate molding powder and the quality of the cellulose acetate molding powder sold by the Tennessee Eastman and the Celluloid Company?

A. Yes, I had a special trip out there. We were having trouble with the matching of the colors, and I took a special trip out to Inland; and I was taken into the laboratory and shown a sample. It was an Oldsmobile steering wheel, and it was a beige color. And they showed me wheels, molded, and sanded wheels, and they asked me if I could see the difference in the color shades, and I said I could not see any difference, and they held it up in different ways, and looked across them and over them, and finally they got a little bit disgusted with me, and they said, "Let us go outdoors," and we went out in the daylight, and they held it up, and I still could not see any difference in the color shades. They looked exactly alike to me, and I began to get kind of acrimonious, and I said finally it must be my bifocals because I could not see any difference, and I know that when we left this place, John Mack and myself were completely frustrated because we felt that we had produced a product that was equivalent, and the color was right, and we deserved a part of the business, and we felt we just were not going to get it.

[fol. 5094] Q. Do you know how the price charged by Tennessee-Eastman for its product compared with the price of your product?

A. My recollection is that the average price of this material was 51 cents a pound.

Q. Well, I am not sure that I understand that answer, Mr. Gillie. You say the "average price." You mean that was your price, or the Tennessee-Eastman?

A. Well, the price of the material was 51 cents a pound, the standard material, and the prices were all the same,

meaning the Tennessee-Eastman price, our price and Celanese.

Q. Will you tell us briefly, Mr. Gillie, just what you did in an attempt to get and to keep this business with the Inland Manufacturing Division? What steps did you take?

A. Well, we set up an office in Detroit and we had technical men in that office. We supplied those men with samples of colors, color chips and blocks of this material, and they got in touch with the body engineers, the stylists, and all those people concerned with the steering wheels in the General Motors Corporation. They invited them to see our exhibit and they went out to call on them, and they gave them blocks of this material from which they cut samples simulating the roundness and so forth of the steering wheel; gave them color chips, and worked with them on the testing of the material.

In addition to that we had a salesman in Dayton—at least he lived in Dayton, and this was part of his business—who called on Inland. We had at Arlington a technical service group who worked with Inland.

We had at Arlington a small laboratory in which we set up a press with which we could make—we could cover [fol. 5095] steering wheels from the inserts that were supplied us by Inland, to match colors. We had—we made—we used just plain rods, round inserts, and molded over those inserts to show the colors, and we had our Production Division, assistant manager of the plant, and superintendent of production, visit the Inland plant to help us to try to get this business.

Q. Directing your attention particularly to the years 1939, 1940, and 1941, were these efforts that you have just described carried on throughout those years?

A. Yes, they were carried on right through 1941.

Q. Did the Inland people ever tell you why they preferred the product of your competitors to your product?

A. Well, yes, they said that they liked the service of the other companies, and both of those companies were very good companies, and they produced a product that we

thought was equal to ours—not any better—and they just seemed to prefer to do business with those two companies, particularly Tennessee-Eastman.

Q. Did you think that the service provided by the Tennessee-Eastman was better than your service?

A. No, I don't think so because Tennessee-Eastman didn't go to all the ends that we did to try to get this business.

Q. Would you say that there was simply an honest difference of opinion between you and the Inland people as to the quality of your products and your service as compared to the product and service offered by your competitors?

A. Well, I just think they preferred to do business with the other people.

Q. This table which has been introduced as du Pont Exhibit No. 400 shows that after 1941 you sold no cellulose-[fol. 5096] acetate molding powder to the Inland Manufacturing Division at all, is that correct?

A. That is correct.

Q. Now, passing over the war years, and directing your attention to a period after the war, did the Inland Manufacturing Division use cellulose-acetate molding powder for steering wheels, after the war?

A. They used a modification of cellulose-acetate which was called "Cellulose-Aceto-Butyrate."

Q. From where did they buy this different plastic?

A. They bought it from Tennessee-Eastman.

Q. Did the du Pont Company make and offer that new plastic?

A. No, we did not.

Mr. Cox: At this point I shall offer in evidence, without reading, certain documents which have heretofore been marked for identification.

These are the documents which have been marked du Pont Exhibits for identification 401, 402, 403 and 404.

(Said documents so offered and received in evidence were marked as du Pont Exhibits Nos. 401, 402, 403 and 404.)

Mr. Cox: I call the Court's attention, and counsel's attention, to the fact that the document which has been marked du Pont Exhibit No. 404 for identification is dated October 30th, but no year is shown.

So far as we can ascertain from the internal evidence of this document and the preceding document, the year should be 1939.

Mr. Harris: Thank you.

[fol. 5097] By Mr. Cox:

Q. So that the record may be clear, I would like to have you identify some of the persons that are named in these documents, Mr. Gillie.

Who was Mr. H. A. Rosley?

A. Mr. Rosley was a sales correspondent in the Arlington office of du Pont.

Q. And who was Mr. J. M. Mack?

A. Mr. J. M. Mack was a salesman in Dayton.

Q. He is the salesman you mentioned in your earlier testimony who had been assigned to this account, among others?

A. That is right.

Q. He is the same man who signed DP Exhibit 404 as "Johnnie Mack"?

A. Johnnie Mack, yes.

Q. One more question about cellulose acetate molding powder, Mr. Gillie.

Did you ever sell any of this material to any of the divisions of General Motors other than Inland Manufacturing?

A. No, we did not.

Q. Now, Mr. Gillie, I should like to direct your attention to another plastic—

The Court: Pardon me. The Court will now recess for fifteen minutes.

(R recess was here taken.)

By Mr. Cox:

Q. Mr. Gillie, I next wish to direct your attention to the plastic that is known generally under the term of acrylic resin.

Have those plastics ever been furnished by the du Pont Company?

A. Yes, sir.

[fol. 5098] Q. In what form did the du Pont Company produce that plastic?

A. We produced it in the form of molding powder, sheets, rods and tubes.

Q. Does du Pont sell it under a trade name?

A. Yes. The trade name is "Lucite."

Q. When did du Pont first begin to produce the molding powder?

A. They first began to produce the molding powder in 1937.

Q. What company first produced the acrylic resin molding powder, if you know?

A. Du Pont.

Q. Have there ever been any other companies who made this molding powder?

A. A Rohm & Haas Company of Philadelphia produces a similar material.

Q. When did it begin to produce the material, if you remember?

A. Molding powder?

Q. Yes.

A. About two years after we did.

Q. Does it sell its molding powder under a trade name?

A. It does. The trade name they started with was Crystallite and then changed it to Plexiglas.

Q. Is this molding powder used in the automotive industry at all?

A. Yes, it is.

Q. When did du Pont begin to promote the use of the acrylic molding powder in the automotive field?

A. In 1937.

Q. What qualities did this plastic have that made it suitable for use in manufacture of automobiles?

A. Well, it is a plastic that has clarity equal to optical crystal.

It is a sturdy material. It had good dimensional stability. It lends itself to a wide range of transparent colors as well

as opaque and translucence. It has the property of carrying light.

[fol. 5099] In addition to which, and probably the most important property for the automobile industry, is its resistance to outdoor exposure. It is the only thermoplastic that will stand up in outdoor exposure.

Q. Is it used today in the automobile industry for parts of automobiles?

A. It is used very widely, yes.

Q. Now, what kind of parts are made of this material?

A. Well, it has been used for some time on interior of the car for decorative purposes as well as utility.

It is used as a lens over the instrument panel, the speedometer. It has been used for knobs for the glove compartment. It is used on hardware trim, on the interior of the car, and it is used for radio grill.

Also on the outside of the car, it is used for tail lights, reflectors, and directional signals, parking lamps, and so forth.

Q. What kind of material did it replace that formerly had been used for these parts?

A. Well, it directly replaced glass.

Q. Is there any other material that it replaced?

A. Well, because of the ability to mold this to more accurate dimensions, it replaced a lot of metal parts that were used to hold the glass in place.

Q. Do you remember when du Pont first got a commercial order for this plastic for use in an automobile?

A. Yes, I do. I went to Bay City, Michigan, to the Bay Manufacturing Company, Electro Auto Lite, and I had an order for 30,000 pounds to be used in the manufacture of a lens for the speedometer, over the speedometer of a Dodge car.

Q. Was that the first commercial order that you had?

A. That is the first commercial order we had for the automobile industry.

[fol. 5100] Q. Now, have you ever sold this material to any of the divisions of General Motors?

A. Yes, we have.

Q. What divisions have bought this material?

A. We have sold the material to Inland, to Guide Lamp, and to A. C. Spark Plug.

Q. Do you sell this material to the divisions today?

A. Yes, we do.

Q. For how long a period of time have you been selling to those divisions?

A. Well, Inland started molding before the war and discontinued, and started in 1944 and the other two divisions started in 1946.

Q. Now, you have referred to your sales to AC Spark Plug Division. You say those sales began in 1946?

A. That is correct.

Q. Has Rohm & Haas ever sold any of this material, do you know, to the AC Spark Plug Division?

A. Yes, I know very well they have.

Q. Do you know whether you or whether Rohm & Haas supplies the greater part of requirements of the AC Spark Plug Division at the present time?

A. Well, in the competitive struggle, we have led part of the time and they have led part of the time. We have had a larger proportion of the business sometime and they have had a larger proportion at other times.

Q. Has there ever been a time since 1946 when you supplied, for any period of time, all of the requirements of the AC Spark Plug Division?

A. No, sir.

Q. Has there ever been a time since 1946 when Rohm & Haas supplied all of the requirements of the AC Spark Plug Division?

A. No, not all the requirements.

Q. Has there been a time that Rohm & Haas supplied more of the requirements of the AC Spark Plug Division [fol. 5101] than you have?

A. In 1948, they supplied most of these requirements.

Q. Is that the only year that you can recall in which that was true?

A. It was nip and tuck in the other years.

Q. Now, do I understand your previous answer to mean that you started to sell Inland Manufacturing Division this material before the war?

A. They started the molding operation down there before the war. They put in some injection molding equipment, and we did sell them some material, I am pretty sure, not very much.

Q. Has Rohm & Haas ever sold any material?

A. Inland?

Q. Yes.

A. Oh, yes.

Q. Do you know whether you or Rohm & Haas at the present time sell to Inland the greater portion of its requirements?

A. Well, the situation there is the same as it was with the AC Spark Plug. We had a larger proportion of the business sometime and they had a larger proportion of the business other times.

Q. When did you start to sell the Guide Lamp Division of General Motors?

A. 1946.

Q. Has Rohm & Haas sold that division any of this material?

A. Have they sold them?

Q. Yes.

A. Yes, they do.

Q. Do you know whether you or Rohm & Haas supply at the present time a greater part of this division's requirements?

A. At the present time?

Q. Yes.

A. I would say almost 50-50 at the present time. We get a little more than 50 per cent of it at the present time.

Q. Have there been times when you have had more than 50 per cent, substantially more than 50 per cent, of this division's business?

A. Yes, we have had as much as 95 per cent of the business, maybe more.

[fol. 5102] Q. Can you tell us, if you know, why you at times obtained that much of this division's business?

A. We produced a red color, which, of course, is used on the rear of the car for tail lights, and we have been able to

produce a color which was sunfast, and which stood up indefinitely in weather and in use.

Q. What color was this?

A. Red.

Q. Did Rohm & Haas produce a red of comparable quality, do you know?

A. They produced a red, but not of comparable quality.

Q. Are the requirements of the Guide Lamp Division, if you know, largely for colored plastic of this type?

A. Well, since they make lamps, they use mostly red material.

Q. Did Rohm & Haas ever develop a red that was comparable in quality to your red?

A. They have now, yes.

Q. After they developed that red, did they get more of the business from Guide Lamp than they had before?

A. They immediately started to get a portion of the business, as soon as they developed a satisfactory red.

Mr. Cox: That is all. You may examine. <

Cross-examination.

By Mr. Harris:

Q. Mr. Gillie, talking first about—what was it, “Lucite”?

A. Yes.

Q. When you say you had over a number of years a rip-and-tuck race between yourself and Rohm & Haas was that principally concerned with technical improvements, that one or the other of you were making, so that when you put a better object out then you got more business, and when they did, they got more?

A. Well, that was part of it.

Q. Was part of it price?

A. No price.

[fol. 5103] Q. No price at all?

A. No.

Q. Now, do you want to finish your answer, sir?

A. I have finished.

Q. Now, calling your attention to du Pont Exhibit N. 400. This is the table that you have referred to showing

the sales of cellulose—acetate molding powder from 1937 through 1947.

Was there anyone else in the automotive business who bought this powder, other than Inland?

A. In the automotive business?

Q. Yes.

A. No.

Q. Do I understand—

A. Will you please state the question again?

Q. I asked you, sir, whether there was anyone else in the automotive business, besides Inland, who bought this powder in those years.

A. For what purpose?

Q. I don't know for what purpose they would use it. I am assuming it is for automobiles?

I will ask you—let us take steering wheels. Is there anybody else but Inland that bought the powder for steering wheels?

A. Yes, sir.

Q. Who did?

A. Sheller Manufacturing Company.

Q. Did you sell Sheller?

A. No, we did not.

Q. Who sold Sheller?

A. Tennessee-Eastman and Celanese.

Q. Did you ever try to sell Sheller?

A. Yes, we did try.

Q. And they didn't buy any of your stuff?

A. No, they didn't buy—

Q. Did they tell you why?

A. They just didn't give us a chance. We didn't have [fol. 5104] much chance to test in there—we just couldn't get in there.

Q. Is there any other company that you couldn't get into?

A. Are you talking about steering wheels?

Q. Yes, I am talking now just about steering wheels.

A. No, there wasn't any other company manufacturing steering wheels.

Q. Am I right in believing that this chart is concerned only with powder sold for steering wheels?

A. That is correct.

Q. Now, first of all I would like to ask you who it was in Inland that you had to see and had to satisfy with your product?

A. Well, we had to satisfy the people in the laboratory—I think the man's name was Geyer, but George Schroyer was the technical man, and they had to be submitted also to the car divisions, to the styling people. Actually what we did, our big problem was to get our material specified.

Q. Yes.

A. And we went to the stylists, to the engineers, and we got our material specified sometimes as the first material, and sometimes as an alternate.

Q. And sometimes the material would be specified, would it not, for knobs and not for wheels?

A. Not for Inland—oh, well, now we are in a different field. If you are talking about knobs, we sold a lot of this material to independent industrial molders who used it for manufacturing parts for the automotive industry.

Q. But you didn't sell any material for knobs to Inland?

A. Not that I recall, no.

Q. All right.

Now, what other companies, if you know, Mr. Gillie, what other automobile companies did Inland Manufacturing [fol. 5105] manufacture steering wheels for, at this time, from 1937 to 1940?

A. It was my understanding that they manufactured for any automobile companies from whom they could get business.

Q. Well, do you know if they did get the business?

A. I don't have any direct knowledge of that. My information comes just from listening to the talk about the kind of business that they did.

Q. Well, that is perfectly all right, sir. Just tell us, did Chrysler give Inland business for steering wheels?

A. I don't know what Inland's business was in steering wheels.

Q. Put it this way: had you heard that Inland was making steering wheels for Chrysler?

A. I had heard that Inland was making steering wheels for all automobile companies.

Q. That's right, sir.

Now, do you know from your knowledge of this business, whether the colors—say on a Chrysler—the color on a Chrysler steering wheel in 1938 was the same as the color on a General Motors, a Chevrolet steering wheel? Do you happen to know that?

A. I don't understand the question.

Q. All right, sir.

Let's put it this way: One of your troubles, as I understand your testimony this morning, was in getting a color that suited the people who had the say, is that right?

A. That's right, correct.

Q. Well, now, let's take one of your colors; let's say in 1938, would that color be yellow, a yellow steering wheel, or red, or black, or what?

A. The colors were determined by the stylists in accordance with the upholstery and the trend in the car, and they changed from year to year.

Q. That's right. So that you would get your steering wheel color, would you not, Mr. Gillie, after the upholstery color had been decided upon?

A. That was the general way of doing it.

Q. And your difficulty, if I understand your testimony, in looking over the exhibits, was in matching the color, wasn't it?

A. That is correct, yes.

Q. Now, there was another difficulty, too, wasn't there, on thickness?

A. That was a mechanical difficulty.

Q. Yes.

A. It was not concerned with the molding powder.

Q. I mean, why is it referred to? What was the difficulty, if you will just tell us?

A. Well, it would be the same with any molding powder. If they got the insert into the die not quite straight, they would have a thicker coat on one side than they would on the other.

Q. Well, that would be their operation?

A. That is correct.

Q. It wouldn't be anything having to do with you, would it?

A. No, that is correct.

Q. Now, what about transparency of color? Would that be your powder, or would that be the application of the powder? When they say "The color is too transparent?"

A. That meant they wanted us to put more pigment into it to get a greater opacity.

Q. Yes. That, then, would be up to you wouldn't it?

A. That is correct.

Q. Now, calling your attention to these figures on du Pont Exhibit No. 400, I notice that in 1939 you have about more than four times the business that you had in 1938, [fol. 5107] How do you explain that? How did you get that?

A. Well, it is my recollection that in two months of that year that they bought most of this powder, and the understanding we had at that time was that they were having trouble either in delivery or some other reason, with the competitor's powder.

Q. Now, did that same reason apply in 1940?

A. No, in 1940 we were specified on some of the cars, and we got some of the business.

Q. Now, we have come to the year 1941, which, of course, we didn't get into the war until the end of the year, did we?

A. No.

Q. But the war in Europe had begun to affect, had it not, the production of passenger cars?

A. It was my recollection that it didn't affect the production of steering wheels, as far as Inland was concerned.

Q. Then how do you account for the fact that you got \$4.00 only? Did you not try for the business at all in 1941?

A. We certainly did try.

Q. Were you met with the same statements as to your color not matching Tenite?

A. Well, I don't think that is just the way to put it, our color not matching.

Q. Well, to explain the use of the words "not match-

ing." I am reading to you from du Pont Exhibit No. DP 404:

"It would be a splendid innovation——"

this gentleman says. I think he is a salesman of yours——

"if we could get our color adopted instead of having to match Tenite."

[fol. 5108] So that you did have some trouble with matching Tenite, didn't you?

A. This salesman is a very aggressive individual, and this is a little sarcasm. We were specified on the blueprints.

Q. Yes.

A. And he was in our terms "throwing the hook" into our color people, that we might get our color specified before the other fellow got his specified, but we were on the prints.

Q. As a matter of fact, the practical situation you had to meet was the situation where Tenite was also in the field?

A. Tenite and others.

Q. Do you have any other explanation of this drop to \$4.00 from \$102,000.00 than what you have given us?

A. No, I haven't any other explanation.

Q. All right, sir.

Now we come to 1942, '43 and '45 on this chart, which shows zeros in the way of sales to Inland. Those were the war years, weren't they?

A. That is correct.

Q. That would make a lot of difference, wouldn't it?

A. Make a lot of difference?

Q. To your sales of color for steering wheels?

A. Oh, it certainly did.

Q. Now, when you come to 1946 after the war——

A. It would make a difference to everybody's color.

Q. Yes, sir, I am only talking about this chart and the reason why the zeros are there. Now you come to 1946, and I understand that the product that you presented was not acceptable because at that time the other companies had made a modification, is that right?

A. Tennessee Eastman had a material which they called [fol. 5109] Tenite II, which was an aceto-butyrates, and that material has been used for steering wheels ever since.

Q. Then in 1946 you did not make that type of thing, did you?

A. No, we made molding powder.

Q. Yes, I understand that, but not of the type that had been accepted, and the same is true, is it not, of 1947?

A. That is right.

Q. I see you have large sales to other customers, what you call sales to all customers, and I note that in the year 1941 where you had \$4:00 to Inland, you had a million dollars, over a million dollars, to all customers.

Now, that would be for other uses, wouldn't it, than steering wheels?

A. That would be for other uses than steering wheels.

Mr. Harris: Thank you, Mr. Gillie.

Mr. Cox: Just one question, Mr. Gillie, so we may have the record straight.

Redirect examination.

By Mr. Cox:

Q. Is it a fact that the year 1941 was really the last year that Inland ever used cellulose acetate molding powder for steering wheels?

A. 1941, I am not familiar, Mr. Cox, with what they did for war vehicles. I assume that they didn't doll up steering wheels for Jeeps or anything of that sort because this was the style then.

Q. So far as you know, that was the last year then that it was used for that purpose?

A. As far as I know.

Q. In any quantity?

A. That is correct.

[fol. 5110] Q. Again, so that the record may be straight, the first column here, sales to all customers, those figures do not represent sales of the material for use in making steering wheels, is that correct?

A. No, they represent sales of materials for automobile parts, for trim, and everything else, but they do not represent sales for steering wheel materials.

Q. On cross examination you said, I think inadvertently, that all the figures on this chart related to sales for steering wheels. That, in fact, is only the sales to Inland that have to do with that use, isn't it?

A. I don't recall I said that because this states here "Sales to All Customers." If I did, it was incorrect.

Mr. Cox: That is all.

Mr. Harris: Nothing further, your Honor.

The Court: You are excused.

(Witness excused.)

Mr. Gribbon: May it please the Court, the next two witnesses will testify concerning du Pont Company's development and sale of the fluid for use in hydraulic brake systems.

This proof is relevant not only to the allegation in the complaint that there was an agreement that bound General Motors to buy from du Pont substantially all of its requirements of products made by du Pont, but also to the allegations in the complaint, particularly paragraphs 64 and 30(c); which charge the existence of another agreement that prevented General Motors from entering any field of chemical manufacture.

[fol. 5111] The first witness, we now call Doctor A. G. Weber.

I believe your Honor has in the book there the documents that will be introduced in the course of these two examinations.

A. G. WEBER, called as a witness on behalf of the Defendants, having been first duly sworn, was examined and testified as follows:

Direct examination.

By Mr. Gribbon:

Q. Will you state your name, please?

A. My name is Arthur G. Weber.

Q. Are you employed now by the du Pont Company?

A. I am.

Q. For how long have you been so employed?

A. I have been with the du Pont Company since 1930.

Q. Where did you take your college work?

A. I got my degree in chemistry and my four-year college degree at the University of Kansas in 1927.

I got my Ph.D. degree in chemistry at the University of Wisconsin in 1930, and then went to work with du Pont after that.

Q. You have been continuously employed by the du Pont Company since that time?

A. I have.

Q. What is your present position?

A. My present position is Section Manager in the Research Division of Polychemicals Department at the du Pont Experimental Station in Wilmington.

Q. I wish to direct your attention to the year 1934. Will you tell us what your position was with the du Pont Company at that time?

A. I was a chemist in the Research Department of the Ammonia Department.

[fol. 51]2 Q. In 1934 what were your specific duties?

A. I was given the assignment of developing a hydraulic brake fluid. This consisted of choosing the proper materials, compounding them into a mixture, testing them in the laboratory to show that they would be suitable for hydraulic fluid, comparing them in the laboratory with competitive materials then available, taking them out in the field and testing them in the field, and getting other people who might be interested in buying brake fluid to test it, finally convincing them that our fluid would be better for their use than the fluids they then had or might be made available to them.

Finally having proven the technical advantages to make the first sale, the Research people would drop out of the picture, and the Sales Division would take over.

Q. You were not connected with the sales effort as such. It was principally the developmental work?

A. My main job was research and the development aspects, yes.

Q. What briefly are the differences between a hydraulic brake system and a mechanical brake system?

A. If we assume for this discussion that the brake shoes

and the brake wheel are essentially the same—actually they are slightly different—but if we assume that the brake shoes and the brake wheels are the same, then the difference is mainly in how one transmits the power from a brake pedal to the four wheels of a car.

In a mechanical system one uses brake rods or cables, clevises, equalizing bars and so on, to get that force from your foot to the four wheels.

With the numerous devices that are needed for mechanical system, since it is exposed underneath the car, as the car gets older they might rust, and finally the force is [Vol. 5113] distributed or could be distributed unequally to the four wheels.

In a hydraulic system we have a closed system in which one has a master cylinder underneath the pedal in which there is fluid which is transmitted by a closed system of tubes to each of the four wheels.

Because this system is tight and transmits this force equally to all four wheels, since it is a hydraulic system, it is not subject to deterioration due to exposure to weather or due to, let's say, bumping into the curb with one front wheel which might shorten the distance, and therefore throw a brake rod in a mechanical system out of adjustment.

So it is easier to keep a hydraulic system in adjustment so far as transmitting the force from the pedal equally to the four wheels.

Q. Can you tell us what are the desirable properties of a fluid to be used in a hydraulic brake system?

A. A good hydraulic brake fluid has to have a high enough boiling point so it won't boil out in the summer time, when the weather gets hot and the brakes might get hot.

It has to have a low enough freezing point that it won't freeze up in the winter time.

It has to be non-corrosive to all the metals in the hydraulic system, and they include iron, copper, aluminum and so forth.

It must not attack rubber, because there are rubber parts in the system.

It must have good lubricating properties because in a brake system there is a piston with a sliding rubber cup

in the master cylinder, and also pistons and sliding-rubber cups in each wheel.

[fol. 5114] In addition to that, it must be stable so that in use and over a long period of time the fluid will not deteriorate.

While this is not an absolute requirement, it is very desirable that the fluid be compatible with other brake fluids that might be put into that system because if another fluid is put into the system as a servicing requirement and the two systems are not compatible, the fluid might separate and render the system inoperable.

Q. When did the du Pont Company enter the brake fluid field?

A. My first work on hydraulic brake fluid development was done in 1932. There was a short period where we looked into the brake fluid situation. We found that there was not a great deal of interest, and we did not have the materials and the ideas at that time that we could put into a good fluid, so I dropped out of the picture.

It was carried on in a minor way until 1934 when I was re-assigned to the job, because there seemed to be a great deal of interest developing in hydraulic brakes, and we thought, maybe we could make a contribution.

Q. In 1934 when you were assigned to this work, did du Pont have a brake fluid?

A. We did not have a brake fluid in the sense it was ready to be marketed. Mr. Moses, who is now dead, had carried on some interest in hydraulic brake fluid development between the 1932 period and the 1934 period, and a brake fluid, an experimental brake fluid, had been submitted for tests which consisted of mainly iso-butynol, water and soap.

Q. Did you improve the fluid that was available in 1934?

A. When I was re-assigned to the job, I felt that this fluid, while it showed some desirable properties, could be improved, [fol. 5115] and I worked up a new composition which consisted mainly of glycerine, iso-butynol, and castor oil.

Q. Did you make efforts to persuade the General Motors units to use the newly developed and improved brake fluid you had brought out in early 1934?

A. I took samples of that to the various General Motors units, to LaSalle, and to Oldsmobile and to Pontiac, and to the Delco Division of General Motors, and to the General Motors Research Laboratories.

Q. Which of the General Motors cars were using hydraulic brakes at that time?

A. During 1934, only LaSalle and Oldsmobile were actually using hydraulic brakes on their cars that were sold to the public.

Q. Were you successful in persuading any of the General Motors units to use your hydraulic brake fluid?

A. Not at that time.

Q. Do you know what fluid Oldsmobile and LaSalle were using?

A. Oldsmobile and LaSalle, in 1934, were using what was generally known as the Lockheed Blue Can fluid.

Q. Who manufactured that fluid?

A. I should say Wagner—no, it was Lockheed Blue Can. It was manufactured by the Wagner Electric Company in St. Louis.

Q. And sold under the name of Blue Can fluid?

A. Blue Can fluid.

Q. What were the ingredients of that fluid?

A. The Blue Can fluid was made up of a 50-50 mixture of castor oil and diacetone alcohol.

Q. Did you compare the Wagner Blue Can fluid with the fluid you were offering?

A. Since this material was quite widely used, and was used [fol. 5116] for new car installations, we compared our fluid very extensively in the laboratory and also in field tests.

Q. What conclusions did you draw from those tests?

A. We concluded that in some properties our fluid was definitely better and in some properties, it was slightly worse, we thought not significantly, but taking it all in all, we thought our fluid was a better fluid.

Q. You thought your fluid was superior to the Blue Can fluid that General Motors units were using?

A. Yes, because our fluid would not freeze up in temperatures that one would encounter in the winter time. It didn't

show any tendency to boil out in the summer time. Probably one of the most important things was our fluid appeared to be stable over a long period of time while the Blue Can fluid was unstable over long periods.

Q. Do you know how the price of the Wagner fluid that General Motors had been using compared with the price of the fluid you were offering?

A. No, I do not, because we were never told what price General Motors could buy the ingredients for or what they might sell it to their units for.

Q. Did you give any consideration to whether your product could be offered at a price that would be competitive with the Wagner price?

A. We made the assumption that as a chemical manufacturer, we would be able to buy these ingredients since General Motors didn't manufacture them themselves and had to buy it—we made the assumption that we would be able to buy these ingredients as cheaply as General Motors, and we assumed we could mix them as cheaply, because we had experience in an operation of this sort.

[fol. 5117] Using that assumption, we developed a price that we thought might be the cost of their fluid, and we also made an assumption on the various compositions that we were developing in the laboratory, and the result of that comparison indicated that our fluid would be cheaper than their fluid, and in talking with the various units in order to get them interested in testing it, we assured them our fluid could be made available to them at a price enough lower than the fluid they were then using to be attractive to them.

Q. Did that offer result in your making any sales of your fluid to General Motors?

A. Not at that time. At a later time we did—not on that particular fluid—but at a later time on a different composition, we sold a small amount.

Q. Did you subsequently develop another type of brake fluid?

A. Yes, after some further work and testing on this first fluid, we might call it glycerin-castor oil fluid, I got the idea if one would take castor oil and propylene glycol and heat

them together and add iso-butynol and heat them; one would get a better fluid, even better than the glycerin type fluid.

After experimenting and testing we were convinced it was better, and we immediately made some field tests and took all of these results to General Motors units and showed them the advantages, and encouraged them to set up tests so that they, themselves, would be able to see the advantages.

Q. Were you successful in your efforts to persuade General Motors units to use this new propylene glycol fluid?

A. No, we were not. Pontiac at a later time ordered a small batch, but it never got into any cars.

[fol. 5118] Q. Could you tell us, did you make efforts to sell this propylene glycol fluid?

A. Yes, we did.

Q. Could you tell us generally the nature of the efforts you made to persuade the General Motors people to use propylene glycol fluid?

A. After this latest improvement we thought we had made a real advance, so we felt we ought to transmit this information along and pass on the results as rapidly as we could develop them.

I made what was almost bi-weekly trips to Detroit over that period, and I went to Pontiac, and I went to Oldsmobile, and I went to LaSalle, and I went to General Motors Research Laboratory, and I went to Delco Products Company in Dayton, because Delco Products, it appeared, was going to supply the brake parts to the various operating units, and as a supplier of brake parts, of course, they would have to know about the fluid that would be used in them, to be sure there would be no incompatibilities develop.

Q. Was there any other reason why you approached the Delco Division?

A. Well, we also had the feeling that there might be a fair-sized market for service brake fluid—that is for cars that were already sold, and in the public's hands, when they needed some service to go back and buy new fluid, or fill their parts with new fluid.

The Delco Company at that time had many contacts over the country through United Motor Service, to service the

brake parts that were going to be put on the cars, and through these many outlets we would then sell a service fluid to the public.

We felt that that was a good market, and we also felt that if we couldn't convince the operating units directly to use [fol. 5119] our fluid, that Delco might, through their efforts, assist us and in that way get the units to buy our fluid.

Q. Now, during what period did your efforts to persuade the General Motors units and Delco to use or buy your fluid, continue?

A. Well, as I recall on the second period of working on brake fluid, I started in early 1934, and this continued through until the middle of the summer or late summer of 1935.

Q. And you were unsuccessful in selling any of the General Motors units for production use?

A. I was unsuccessful, with this one exception that I mentioned: Where we delivered a small amount to Pontiac, but it never got into the cars.

Q. By the way, what General Motors car divisions were at that time, say late in 1934 and early in 1935—what car divisions were using hydraulic brake systems?

A. In 1934 Oldsmobile and LaSalle, and in 1935 Pontiac also used it on their new cars.

Q. Do you know what fluid these divisions were using?

A. By 1935 these units were using what was then called Delco No. 5 brake fluid.

Q. Who manufactured the Delco No. 5 brake fluid?

A. Delco bought the ingredients—that is, Delco did not manufacture any solvents. They bought the ingredients and mixed it in their plant, and then supplied it to the operating units of General Motors.

Q. The Delco Division of General Motors was mixing the ingredients and supplying a finished fluid to the car units?

A. That's right.

Q. And that product was called Delco No. 5?

A. Delco No. 5 fluid.

[fol. 5120] Q. And what were the ingredients of this fluid, do you know?

A. This fluid, in so far as one could tell in performance or by analysis was the same as the Wagner fluid, that is

it was 50 per cent castor oil, and 50 per cent diacetone alcohol.

Q. That was the fluid essentially that you had tested and compared with yours earlier in the year?

A. That's right, and we had checked it when it came out under Delco's name.

Q. Did you succeed in getting any of the General Motors divisions to approve your brake fluid?

A. Yes, during the time I was associated—over this period mentioned, both Olds and Pontiac approved, as far as the technical characteristics were concerned.

The Court: The Court will now recess.

(Whereupon a recess was taken until 2:00 o'clock p. m. (CDST, of the same day, Friday, May 1, 1953.)

[fol. 5121] The Court: Proceed.

A. G. WEBER, a witness on behalf of the Defendants, having been previously duly sworn, resumed the stand and testified further as follows:

Direct examination (continued):

By Mr. Gribbon:

Q. Prior to the recess, Dr. Weber, you testified of your efforts to promote the use of your propylene glycol fluid; you had succeeded in gaining the approval of two General Motors Divisions, but you had been unsuccessful in making sales to any of the General Motors Divisions. Were you at any time advised by the representatives of the General Motors Divisions about their reasons for not using your fluid?

A. No, I was not. In talking with one unit, one person might complain that the rubber swelling was too great; another unit might complain that the fluid corroded the metal to too great an extent, and one other unit might say well, they wanted to test it for a longer time.

[fol. 5122] I was never able to find out just why they were not willing to go ahead with it.

Q. Did you yourself perform tests to determine the

parative quality of the Delco No. 5 fluid to your own fluid?

A. Yes, I did. I might say I had assistance in the laboratory. I do not mean to say that I carried out every one of those tests myself, although on a large portion of them I did.

Q. What were the results of those tests?

A. In some properties our fluid was definitely better than the blue can fluid.

For instance, in boiling point and freezing point. In some respects, the blue can fluid was slightly better than our fluid, for instance, the lubrication. We felt it was better slightly, but not significantly.

Q. Did you conclude that your fluid was comparable in the overall to the Delco No. 5 fluid?

A. We concluded it was not only comparable, but we felt it was better.

Q. You used the term blue can fluid.

A. I meant to say Delco No. 5, because it was the same as the blue can fluid.

Q. Do you know what the comparative price of your fluid was as compared to the Delco No. 5 price?

A. No, I did not, because they never gave us the price they had to pay for their ingredients or the finished fluid. When I say "they", I mean General Motors.

Q. They never told you the price that they paid for this Delco No. 5 fluid?

A. No, we were never able to find out.

Q. Did you at that time form any judgment as to whether you would be able to sell your fluid at a competitive price?

A. Well, we knew the composition of their fluid; we knew [fol. 5123] their fluid was made by purchasing these materials on the outside. They did not manufacture any materials, and we made the assumption that we could buy those materials as cheaply as they could on the outside, and we assumed that we knew how to mix them, and formulate the compound as efficiently as they could.

We assumed the other operations in selling could be done as efficiently.

Knowing the price that we could produce our own fluid for, we concluded that our fluid could be sold to them cheaper than the other, and we assured them we would sell

to them at a price enough lower than the fluid that they were then using to be attractive.

Q. Did you find, during this time in 1934, that the General Motors divisions permitted you to use their laboratories and cooperated in testing your fluid?

A. They gave us what might be considered limited access to the laboratories, and what might be called limited cooperation. Of course, that is a relative matter, and I say that because in working with Chrysler and Studebaker and Reo and these other companies, we had much more complete cooperation.

For instance, at Studebaker, we were able to go back in the laboratory and see the tests set up, and see them come off, see the measurements made, and discussed the result from a purely technical standpoint, and formed opinions about the comparative data.

The same thing was true at Reo and at Chrysler. We had practically as complete cooperation as at the other two places.

[fol. 5124] Mr. Gribbon: I offer in evidence exhibits which have been previously marked for identification, DP Nos. 383, 384, 385, 386 and 387.

These exhibits are reports extending from the period November, 1934 through August, 1935, and reflect the efforts of Doctor Weber to interest General Motors and other automobile companies in propylene glycol fluid that du Pont was promoting at this time.

(Said documents so offered and received in evidence were marked du Pont Exhibits Nos. 383, 384, 385, 386 and 387.)

Mr. Gribbon: I do not propose to read these exhibits.

By Mr. Gribbon:

Q. How long, Doctor Weber, did you continue your efforts to persuade General Motors units to use your fluid?

A. To the middle or the end of the summer of 1935, as I recall.

Q. What was the occasion of the cessation of your efforts then?

A. At that time, we temporarily withdrew our fluid from the market.

Q. Why did you take that action?

A. In the spring of 1935, we entered into an arrangement with Wagner to assist us in the marketing of our fluid.

Before we talked to Wagner, we made the assumption that we would sell approximately 250,000 gallons of brake fluid a year.

When we began to talk with Wagner, they stated that if they had any part in marketing it themselves that the market would be 750,000 gallons approximately per year.

[fol. 5125] When we formulated the composition of our brake fluid, we used the propylene glycol that I mentioned which was available in sufficient supply for 250,000 gallons, but there was not enough for 750,000 gallons, so we had a problem, and we decided to submit a sample to Wagner at the time of making this arrangement, which included ethylene glycol instead of the propylene glycol.

This had not been completely tested in our laboratory. This was started in their laboratory. They had some doubts about whether they would get satisfactory results, and so in order to resolve this problem, we decided to withdraw from the market temporarily to make a thorough study of all the samples of propylene glycol which had been previously submitted to us, what results they were going to have with the people who were testing it, and to examine the result.

Until that was out of the way, we felt that we should not offer it further.

Q. Which fluid was it that Wagner considered?

A. It was the fluid which contained the ethylene glycol instead of the propylene glycol.

Q. Which fluid had you been attempting to sell General Motors during the previous year?

A. We had been attempting to sell General Motors the propylene glycol.

Q. Did you personally participate in the tests of your fluid late in 1935 that you have just described?

A. You mean making the survey?

Q. Yes.

A. No, I did not.

Q. Who did that work?

A. That work was carried on by Mr. Walker who had come into the work a little bit earlier than that.

[fol. 5126] Q. Did you thereafter continue to work on the development of brake fluids?

A. I withdrew at the time the survey was started among the people who had been working with me previously, and who had the tests under way.

Q. Since then, what responsibility have you had in connection with brake fluid?

A. I have had no direct responsibility.

Q. Dr. Weber, is the manufacture of brake fluid complicated?

A. I should say it is about as simple an operation as one could have. It is chiefly a mixing operation, only it is the heating of the castor oil, but it is about as simple an operation as one could set up.

Q. Are there any hazards attendant upon the manufacture of brake fluid?

A. No, there are not. I would say there are as few hazards as any chemical operation that I know of that is carried out.

Mr. Gribbon: That is all.

Cross-examination.

By Mr. Hoyt:

Q. Mr. Weber, when did hydraulic brakes first come into general use in passenger cars?

A. When you say "general use"—

Q. I mean the production models.

A. Well, I think that Chrysler probably started in the early '20's. When I say "Chrysler" I do not mean all of their units. I mean some of them.

Q. So that cars could be purchased, could they, in the '20's and in the early '30's by a consumer with hydraulic [fol. 5127] brakes, if he went to Chrysler?

A. Some cars. I don't which ones.

Q. Do you know where Chrysler obtained their brake fluid?

A. You are talking about the fluid that was installed in

Chrysler cars on Chrysler assembly lines?

Q. Yes.

A. I believe that they manufactured it themselves, manufactured it in the sense that they mixed the ingredients. They did not manufacture the ingredients.

Q. Mixed their own ingredients?

A. They bought the solvent and other things on the market, put them together, with some mixing devices. They could have had them mixed by someone who sold them the solvents; I am not sure of that.

Q. And General Motors started in 1927 on their LaSalle and Oldsmobile, is that right?

A. They put hydraulic brakes on their cars that they sold the public first in 1934. They had started testing before that time.

Q. When did Ford first use hydraulic brakes?

A. Ford, I believe was the last of the Big Three—some time after Chevrolet. I don't know whether it was—I would guess—I don't know the exact date. I would guess it was in 1936, but I am not sure of that.

Q. Do you know whether or not Ford mixed their own fluid?

A. I don't believe I was ever told whether they did or not. I think probably they mixed part of it, but I am not sure.

Q. Now, in 1924—

A. Pardon me just a minute. The Ford adoption of hydraulic brakes came after I had gotten out of direct responsibility, so this is just a guess.

[fol. 5128] Q. I see. Now, du Pont first offered a hydraulic brake fluid in 1934?

A. Offered for test?

Q. Yes, or for sale; for use, let's say?

A. No, we had some testing done in 1932. This first time I was assigned. I think that sample got to at least one part of General Motors before that time.

Q. Was that the propylene glycol?

A. No, it was not. It was just fluid that Mr. Moses had worked on.

Q. And your propylene glycol was first ready for use, when?

A. Pardon me, I didn't understand.

Q. When was your propylene glycol ready for use?

A. It was introduced for testing sometime during 1934. I don't remember the exact time. It was after the glycerin fluid had been out for testing for a while, and then I got the idea of this further improvement.

Q. Was propylene glycol the same—was it referred to by any number comparable to, say, Delco No. 5? Did you have a number for propylene glycol?

A. I believe in the laboratory we, of course, made a number of compositions to try out, and then tried to pick the one that seemed to do the best job, so frequently we would start with "A" series of compositions, and No. 1, 2, 3, 4, 5, and then jump to some other.

I believe that was called F-4, but I wouldn't want to trust my memory that far. No, I beg your pardon. I believe the glycerine was F-4. I don't remember that well enough to answer.

Q. When did Delco Laboratory, Delco Products, first start mixing fluid?

A. When did Delco Products start first mixing fluid for test or for sale?

[fol. 5129] Q. For sale.

A. I believe it was 1935.

Q. 1935. And that was their Delco No. 5?

A. Delco No. 5 which, so far as we know, was the same composition as the Blue Can fluid which Oldsmobile and LaSalle used in 1934.

Q. What was that mixture again?

A. Delco No. 5 at that time was a 50-50 mixture of the castor oil and diacetone alcohol.

Q. And then when you brought out your propylene glycol, you purchased the materials, did you not, and mixed them?

A. We purchased them and mixed them?

Q. Yes.

A. No.

Q. You produced them yourself?

A. We produced the iso-butynol in our Bell plant. We produced the propylene glycol in our Bell plant. We purchased the castor oil. The castor oil was a minor part of the mixture.

Q. I see.

Do you know whether or not Delco ever used a diethylene glycol glycerin fluid?

A. Diethylene glycol glycerin fluid?

Q. Yes.

A. It was either Delco or General Motors that had proposed a composition at one time that had diethylene glycol in, and it had been submitted to one of the operating units for test.

We knew that because we thought that our fluid was being tested, and we found out that that fluid was being tested in place of the one that we thought was to be tested.

Q. I show you an exhibit marked DP-383, and call your attention to the second paragraph, the sentence beginning:

"He contradicted an earlier statement when it was [fol. 5130] mentioned that Olds and Pontiac had been given samples of Delco fluid (diethylene glycol-glycerin fluid) and discouraging results had been obtained"—

and so on.

That would not refer to the Blue Can type of fluid?

A. No, Blue Can was castor oil-diacetone fluid.

Q. I see.

I also call your attention to a sentence in the third paragraph:

"They feel that the price advantage will be the biggest talking point in going to GM units because they and GM think that Blue Can fluid is satisfactory in all respects."

A. I am sorry, I don't see that sentence.

Q. It is in the third paragraph, the last paragraph on the page, the sentence about the middle.

A. Oh, "They feel that——"?

Q. Yes. Will you read it to yourself, please?

A. Yes.

Q. Now, was the Blue Can fluid at that time cheaper than the fluid you were proposing to sell?

A. I don't know, because they never told us the price of Blue Can fluid. We assumed, however, that our fluid would be cheaper, based on the calculations that we, ourselves, made, assuming that we would be able to buy these ingredients as cheaply as Delco could buy these ingredients.

Q. As cheaply?

A. As cheaply.

Q. I see. Well, how about the Delco number? Did you say Delco No. 5 was the same as the Blue Can?

A. The Delco No. 5 was the same as the Blue Can fluid, that's right.

[fol. 5131] Q. Now, on the last page of that exhibit, would you notice the second sentence. I will read the first sentence:

"It developed that Delco still thinks they have a good fluid for the Kelsey system. This indicates that if GM makes a change that Delco will boost their fluid in preference to du Pont to the GM units."

I don't have any question to ask about that particular sentence, but I just call your attention to it.

I now call your attention to du Pont Exhibit No. 385. You will note the date of this is November 23rd, 1934. Now, at that time, was Delco offering for sale a brake fluid?

A. This is hard to answer exactly, but let me answer it this way: In 1934 Oldsmobile and LaSalle were the only General Motors units that had hydraulic brakes on them, and they were using Wagner Blue Can fluid. The 1935 model of Pontiac had hydraulic brakes on it as well as Olds and LaSalle. The 1935 model was used, was using the Delco No. 5, and whether that model was introduced before the end of the year, I am not sure, but let's say approximately at the end of 1934 Delco began to supply General Motors units with their Delco No. 5 fluid.

Q. It was customary, was it, to contract for that sort of thing before the new model came out?

A. I don't know because this is a matter that was handled within the General Motors units.

Q. I call your attention now to the second paragraph of this document, the second sentence, "When the writer refused—" that is you—"refused to give this—" he is talking about composition of your fluid, I take it,— "Case indicated [fol. 5132] that it could be easily obtained through the proper channels when the time came."

What did you have in mind? What did you mean by that phrase "through the proper channels"?

A. I assumed that he would call my superior in Wilmington.

Q. Who was your superior?

A. My superior at that time was Mr. M. H. Merriss, I believe, although Mr. Woodhouse also had an interest in brake fluids at this time.

Mr. Merriss was following the part that related to sales, and Mr. Woodhouse was following the part which related most to research.

Q: And you had an idea that your superior would give this information, is that correct?

A. I had an idea that they would?

Q. Yes.

A. I had no way of knowing whether they would.

Q. Mr. Rasmussen at this time was employed by whom?

A. I didn't understand the question.

Q. By whom was Mr. Rasmussen employed?

A. Mr. Rasmussen was the engineer in charge of brakes, the brake development at the Delco Products Division of General Motors.

Q. Was Delco making the brake parts then?

A. In 1934—I am not sure of this, but I believe they were making both LaSalle and Oldsmobile parts at that time. They were doing a lot of experimenting. They were getting ready for the next year, so I believe that they were making Oldsmobile and LaSalle parts at that time.

Q. Yes: Now the fluid you were talking about here, is this still the propylene glycol fluid?

A. Yes, this is the improved fluid which we made by heating a mixture of castor oil and propylene glycol and adding isobutanol to it.

[fol. 5133] Q. Is this the same fluid that is sometimes referred to as No. 21, or did that come out later?

A. The Wagner 21 fluid was the propylene glycol fluid we had here which had been changed very slightly in adjusting the ratios of the castor oil and propylene glycol. When it was marketed, it was marketed as the Wagner 21 fluid.

Q. Now you testified that you withdrew your propylene glycol in early 1935, is that right?

A. We withdrew our propylene glycol?

Q. Yes.

A. No, I didn't say that.

Q. What was that?

A. I said we held up development until we had a chance to check the results which Wagner brought out in connection with the ethylene glycol fluid, this one sample of fluid that was submitted to Wagner and which they tested under a very special set of conditions, and because we wanted to be sure to resolve this, then we went back and investigated and studied all the fluids that were out, including the propylene glycol fluids. We had no criticism on any of the propylene glycol fluids.

Q. Up until this time what automobile companies had purchased your propylene glycol, up until the time you stopped development work, as you put it?

A. That is hard to answer. Let me answer it this way. No General Motors units had purchased fluid at this time.

We made one sale of 50 gallons of this fluid to Reo, and I am not sure whether it was before this date or after this date, but it was for their 1935 models which were just being put into production. Although 50 gallons is a small amount of fluid, it did take care of some 500 cars, and they expected to buy more later.

[fol. 5134] Q. Did they buy more later?

A. No, they did not. The reason they did not, I might add, is that the hydraulic brakes which they had put on their passenger car, it was a hydraulic brake which was manufactured by Inland Company, a new type of brake.

They were using the Wagner brake on trucks, and the Wagner Company said that they would withdraw the brakes from their trucks if they continued to use these new brakes on their passenger cars.

So because the truck business to Reo was more important than passenger car business, they of course had to withdraw their brakes from their passenger cars.

Q. I call your attention now to Defendants' Exhibit No. DP 386, and direct your attention to the second paragraph:

"The conference was opened by Rasmussen asking Olts whether he had changed his mind about du Pont fluid. Olts' answer was: 'Frankly, I started work with a strong prejudice against du Pont fluid, but, unless something unexpected develops in the practical tests, I am convinced that du Pont fluid has many technical advantages over Blue Can fluid.'"

Do you know why Mr. Olts had a strong prejudice against the du Pont fluid originally?

A. General Motors never told us very much about the testing they were doing, either on our own fluid or on other fluids. So anything I might say here would be just a guess. One might guess that they were trying to develop a fluid of their own.

Q. Mr. Olts was the engineer in charge of testing, wasn't he?

[fol. 5135] It shows on the face of the document?

A. Well, he, at least, carried out in the laboratory the test on brake fluids. I think he was not responsible for car tests.

Q. I now call your attention to the next paragraph, next to the last sentence:

"The low viscosity of our fluid was referred to by Olts as a decided advantage except that it might cause noise in the master cylinder if an orifice type pressure compensator is used in place of the present Lockheed type."

Now, would you explain about this orifice type pressure compensator?

A. That gets into engineering details.

Q. Just simply, if you could. I mean, not in engineering details. Let me ask a question.

Would that mean that you had to change the type of compensator or that GM would have to use this type of compensator if they wished to use your fluid?

A. This is just a guess because I am not an expert on this particular thing, but as I understand it, there was a slight noise developed, and it is a question of whether a person would hear that noise or not.

If a person heard that noise and considered it an objection, then, of course, you would have to change it. If they didn't, then you wouldn't. But Rasmussen, the engineer in charge, said that the other advantages were so great that this could be forgotten about. I would have to take his opinion on that.

Q. If the orifice type pressure compensator; if there were a change in that, would that make the system in [fol. 5136] compatible with the Lockheed system?

A. I am not sure I understand just what you mean. You mean if you had to change this orifice?

Q. Yes.

A. Would it then be necessary to change the entire brake?

Q. Would it then be compatible with the Lockheed system?

A. Well, this orifice was on the Lockheed system.

Q. The same type?

A. So far as I know.

Now, this is a detail which, so far as I am concerned, I will have to take Mr. Rasmussen's word on it.

Q. Now, after 1935 you made some sort of an agreement with Wagner, was that it?

A. Yes, in the spring of 1935, I believe.

Q. That they would market your propylene glycol under the name of No. 21, is that right?

A. Well, the agreement, I don't believe, stated that they would do it under that number. But there was an agreement to market du Pont fluid, and it was expected, of course, as time would go on, that we would improve that fluid, as time and experience showed that improvements could be made.

Q. I take it that that arrangement continued during the time you were connected with brake fluids?

A. I got off of the brake fluid work at the time that this survey started. This agreement carried on in the market in an dfor some years after, I am not sure just how long, but I think up until about a year ago.

Mr. Hoyt: That is all.

Mr. Gribbon: No redirect.

(Witness excused.)

Mr. Cox: We will call Mr. K. E. Walker.

[fol. 5137] K. E. WALKER, called as a witness on behalf of the Defendants, having been first duly sworn, was examined and testified as follows, to wit:

Direct examination.

By Mr. Cox:

Q: You are K. E. Walker, is that right?

A. Yes, sir, that is my name.

Q. You are now employed by the du Pont Company?

A. Yes, sir.

Q. What is your position with the du Pont Company?

A. My present position?

Q. Yes.

A. Senior supervisor in the research division of the polychemicals department.

Mr. Cox: Your Honor, are you able to hear the witness?

The Court: Yes? Keep your voice up, please.

By Mr. Cox:

Q. How long have you been employed as a chemist in the du Pont Company?

A. I have been employed by the du Pont Company since 1930.

Q. During that period have you done any work on hydraulic brake fluid?

A. Yes, sir, I have.

Q. When did you first do any work on the hydraulic brake fluid?

A. I first started on hydraulic brake fluid in November of 1934.

Q. What kind of work were you doing at that time?

A. At that time I was preparing samples of fluid to be sent out for tests. I was testing various fluids, comparing properties of other fluids available with our fluid, and doing general test work of that sort.

[fol. 5138] Q. Did you visit prospective customers at that time?

A. I did not at that time.

Q. Dr. Weber who preceded you on the stand has testified that you replaced him in certain work that was being carried on in connection with brake fluid.

When did that occur, if you remember?

A. At about the time that the sample he mentioned was withdrawn from the Wagner Electric Corporation and from the other places, I replaced him in the work.

Q. What was the first thing you did after you replaced Dr. Weber in that work?

A. Well, in the beginning I worked on determining the reason for the difficulty with the sample, finding out what happened. When we knew that, we then began to formulate a propylene glycol composition which would be satisfactory, and after some months we then examined the car tests that we had set up on that fluid, and decided that this composition, which varied only slightly from the original propylene glycol composition that we set out, was a satisfactory composition in our estimation.

Wagner seemed inclined to want to delay a little bit on that. They weren't quite so sure. We felt the tests which had been set up in several parts of the United States showed that the fluid was satisfactory. Therefore, it was decided that Dr. J. A. Almquist, who was, I believe, assistant chemical director of our department at that time, should make a survey of some of the automobile engineers who had tested our propylene glycol fluid to determine whether they felt and confirmed my belief that the fluid was satisfactory.

I was elected to go along and assist Dr. Almqvist.
[fol. 5139] Q. What automobile companies did you visit in that connection?

A. We visited Oldsmobile, Pontiac, General Motors Truck, Reo, Chrysler, and Studebaker.

Q. Did you reach any conclusion as a result of this survey that you made?

A. The conclusion as a result of this survey was that our fluid was satisfactory. Various automobile engineers confirmed that in their opinion the fluid had performed satisfactorily in the tests that they ran. Dr. Almqvist then gave the opinion that we should go ahead and manufacture the fluid.

Q. Did you go ahead and manufacture the fluid?

A. Yes, we began manufacturing propylene glycol fluid in June of 1936.

Q. Now at that time was there any shortage of propylene glycol?

A. Not that I recall. We were able to buy propylene glycol sufficient for our needs.

Q. Do you know whether there had been any change in that respect between the time that your sample had been submitted to Wagner, which caused the survey, and the time you resumed production?

A. Well, I believe that Carbide had increased their production facilities. At least, we were able to get sufficient propylene glycol at this time by purchase on the outside for higher requirements than we had been able to earlier.

Q. You used the term Carbide. I think you had better tell us what you mean by that?

A. By Carbide, I mean the Carbide & Carbon Chemical Corporation.

Q. What was the designation under which this fluid du Pont made was sold commercially?

A. The fluid designation was Lockheed No. 21.

Q. What difference, if any, was there in this fluid and the propylene glycol fluid, if you know, that had been submitted to General Motors for test in 1934 and 1935?

[fol. 5140] A. The difference was slight. It was merely a matter of a change in ratio of the propylene glycol and castor oil components.

Q. Mr. Walker, after du Pont began to produce this fluid, which I shall hereafter refer to as Lockheed No. 21, did you make any effort to sell this brake fluid to General Motors?

A. Yes, I began contacts with various units of General Motors in an attempt to sell them our fluid.

Q. Do you know what fluid General Motors was using at this time?

A. At that time, in the period of 1936, they were still using Delco No. 5 fluid.

Q. Where were they getting that fluid, if you know?

A. They were purchasing—the Delco people were purchasing the ingredients, mixing the ingredients, castor oil and diacetone alcohol to make the fluid.

Q. At this period in 1936, do you know what cars produced by General Motors were equipped with hydraulic brakes?

A. Essentially all of the General Motors cars had brakes at that time. I believe possibly the V-16 Cadillac did not have them.

Q. What steps did you take to try to persuade General Motors to use Lockheed 21?

A. We had various test data from the laboratory and car tests, comparing Lockheed No. 21 fluid with the Delco No. 5 fluid:

I used that information in discussions with the engineers to try to persuade them that our fluid was superior to the Delco No. 5. In fact, it had better high temperature characteristics, had better low temperature characteristics, both in freezing point and in viscosity, which is important in low temperature operations.

[fol. 5141] Q. Were you able to persuade any of the units of General Motors to adopt and use Lockheed No. 21?

A. No, I was unable to. I believe for a short time General Motors Truck did use it.

Q. Did the representatives of General Motors ever tell you why they did not wish to adopt and use Lockheed No. 21?

A. Yes, they gave me some reasons. Chaminade, of Chevrolet, for instance, at one time said that Delco No. 5

fluid had lower rubber swelling than our Lockheed No. 21. This was contrary to our test, and we investigated it thoroughly, and finally we were able to find that they had been using an incorrect test method to determine that.

They had used two kinds of cups, a different kind of cup in each fluid, so that the results were not comparable.

I believe I was later able to prove to them that our fluid was at least as good, if not better, in rubber swelling because he approved it for the use in one of their plants.

Q. Who was Mr. Chaminade?

A. Mr. Chaminade, I believe his title was chassis engineer with the Chevrolet, and his responsibility was mainly brakes.

Q. Now, in explaining to you why they did not wish to adopt the Lockheed No. 21, did the General Motors representatives ever say anything to you about that price of your fluid?

A. Yes, at times they did mention that the price of our fluid was higher than Delco No. 5.

Q. Did you find out what the price of Delco No. 5 was?

A. No, I did not.

Q. Did you find out? Did you try to find out?

A. Yes, I made several attempts to find out, but they were unwilling to tell me.

Q. Did you ever at any time, while you were dealing with General Motors, learn how the price of Lockheed No. 21 [fol. 5142] compared with the price of Delco No. 5?

A. Well, at one time in early 1938, I believe it was, I told Mr. Dernier who was the purchasing agent for Oldsmobile, that we would be willing to sell them our fluid for approximately 95 cents per gallon.

At that time, he in my presence, talked with Mr. Leach who was in the engineering group. I believe he was the assistant engineer, and told him—I am sorry, it was Mr. Wolfram at Oldsmobile; in my presence, he told Mr. Wolfram that the price was right. So I assumed that our price quotation was approximately the same as the No. 5.

Mr. Cox: At this point, may it please the Court, I would like to offer in evidence a document which was heretofore

marked du Pont Exhibit No. 388, dated January 14, 1938, addressed to Mr. J. C. Woodhouse, experimental station, and it bears the name and signature of K. E. Walker.

(Said document so offered and received in evidence was marked du Pont Exhibit No. 388.)

By Mr. Cox:

Q. Did you write this report, Mr. Walker?

A. I had it typed, yes, sir.

Q. You dictated it?

A. Yes, sir.

Q. Did this report refer to the contents you just testified about?

A. Yes, it does.

Mr. Cox: I call the Court's attention to the fact that this report was written contemporaneously. Mr. Walker stated:

"Mr. Goldsmith of the F. & F. Flint Plant arranged that Mr. Dernier was to put the writer in touch with the Oldsmobile engineers interested in hydraulic brake [fol. 5143] fluids. On arriving at Mr. Dernier's office he immediately asked about the price and advantages of No. 21 fluid over the fluid they are now using. He was told the price would be approximately 95 cents per gallon in tank car quantities and informed of the various advantages, including superior low temperature properties and stability. He then called Mr. Wolfram, Assistant Chief Engineer, and asked him if he would like to talk to the writer about No. 21 fluid. During the conversation Mr. Dernier mentioned to Mr. Wolfram that the price structure was right. However, Mr. Wolfram was apparently not interested."

By Mr. Cox:

Q. Did Oldsmobile purchase any Lockheed 21 fluid from du Pont after you quoted this price of 95 cents a gallon per tank car?

A. No, they did not.

Q. How long, if you know, did the various General Motors Divisions continue to use this Delco No. 5 fluid that you have referred to?

A. Well, they used it until sometime in either late 1938 or early 1939, I believe.

Q. What fluid did they begin to use at that time?

A. At that time, they began using a fluid known as Delco No. 9.

Q. What kind of fluid, if you know, was Delco No. 9?

A. It was a fluid that was quite similar to ours except that it had a minor amount of castor oil, and a fairly large amount of propylene glycol, and the propylene glycol derivatives, and normal butanol instead of isobutanol.

Q. Who developed the Delco No. 9 fluid, if you know?

A. That was developed by the Delco Brake Division of General Motors, and by Union Carbide.

[fol. 5144] Q. Who actually made this Delco No. 9 fluid? Who manufactured it?

A. I understood that it was manufactured by the Delco Brake Division of General Motors. That is, it was mixed by them.

Q. Where did the Delco people get the ingredients, if you know?

A. I understood that the ingredients were purchased from the Carbide & Carbon Chemicals Corporation, which is a unit of Union Carbide.

Q. Did you understand that you purchased all of the ingredients from Carbide & Carbon?

A. No, they purchased all the ingredients except the castor oil. I don't know where they purchased the castor oil.

Q. After General Motors units began to use this new fluid, Delco No. 9, did you attempt to persuade them to use Lockheed 21 instead of Delco No. 9?

A. Yes, I still continued in my efforts to persuade them to use our fluid. We had certain advantages even over No. 9 fluid.

We felt that the higher quantity of castor oil in our test substantiated this opinion of better lubrication, and there was quite a bit of aluminum corrosion. The aluminum parts

in the various brake cylinders were corroded by this Delco No. 9 fluid.

Q. Did the people in General Motors give you any reasons for preferring Delco No. 9 to Lockheed No. 21?

A. The principal reason that they gave us was in the boiling point. The Delco No. 9 fluid had a boiling point which was approximately 20 degrees Fahrenheit higher than the No. 21 fluid.

Our tests, however, and the large volume of fluid which we had sold showed that these higher boiling points were not necessary.

[fol. 5145] Q. What was the boiling point of Lockheed No. 21?

A. The boiling point of Lockheed No. 21 was approximately 240 degrees Fahrenheit.

Q. What, if you know, was the boiling point of Delco No. 9?

A. At that time it was approximately 260 degrees Fahrenheit.

Q. Now, did you regard this difference in boiling point as significant or not significant in its relation to the quality of the two fluids?

A. Well, we felt that the large number of cars and trucks that had been using No. 21 without difficulty, and from temperature measurements in brake cylinders that had been reported to us, that it was not necessary to have fluid with a higher boiling point than No. 21.

Q. You referred in that answer to the fact that No. 21 was being used in a large number of cars and trucks.

At this time—that is to say, in 1938—and thereafter—was Lockheed No. 21 sold commercially in large quantities?

A: It had been sold commercially since some time in 1936 in large quantities for service use, and had been used in many trucks.

Q. Do you know whether it had been bought by any automobile companies for original installation in their cars?

A. Yes, it had been used in original installations, in Packard, Studebaker, in Nash—essentially all of the independents.

Q. Now, did you ever convey or report to the people in General Motors your findings and conclusions with respect to the difference in the boiling point of these two fluids?

A. Would you repeat that question?

(Question read.)

[fol. 5146] By the Witness:

A. Yes, I had discussed that with the people in General Motors several times.

By Mr. Cox:

Q. What did they say to you when you reported your findings, do you remember?

A. Well, in the case of Mr. Case at General Motors Research Laboratory, he still maintained the opinion that the 20 degree higher boiling point was a step in the right direction. Later on he pretty well conceded the point that he did not have definite proof that the boiling point differential was necessary.

Mr. Leach of Pontiac also pretty well confirmed that it was not necessary, as far as their records had shown.

Q. Did you at any time have any complaints from users of Lockheed No. 21 that the boiling point of the fluid was too low?

A. We did not have, and the Wagner Electric people, who generally handled most of the complaints, told us that it was entirely satisfactory, that they had many fewer complaints than they had ever had before in the brake fluid.

Q. Now, in these discussions about the adoption of Lockheed 21 by General Motors, did the representatives of General Motors ever say anything to you about the price of Lockheed No. 21, as compared with the price of Delco No. 9?

A. Well, at one time in the discussions with Mr. Leach at Pontiac, I had quoted, or we had quoted the price of 91 cents per gallon for brake fluid to General Motors units. In discussions with Mr. Leach, he pointed out that Delco No. 9 fluid cost the General Motors units approximately four cents a gallon more than Delco No. 5, and that Delco No. 5 [fol. 5147] fluid cost more than No. 21, at the time we were quoting 91 cents.

We did not know exactly how much more No. 5 cost than No. 21, but that meant that the differential of No. 9 and No. 21 was greater than four cents a gallon.

Q. Am I to understand from that answer, at least at the time of this conversation, the price of Lockheed No. 21 which was quoted to General Motors, was lower than the price of either Delco No. 5 or Delco No. 9?

A. At that time.

Q. Did any of the General Motors units buy Lockheed No. 21 after the price was lowered to 91 cents?

A. No, they did not.

Q. Had your price, by the way, been higher than 91 cents at one time?

A. Yes; at one time it was higher.

Q. Now, after the price was 91 cents, did the General Motors people give you any more reasons why they preferred not to buy Lockheed No. 21?

A. Well, I learned the reason in discussions with Mr. Leach in Pontiac. He mentioned that at the time they began making the Delco No. 9 fluid that the various General Motors units had decided to buy the fluid from Delco so that they would be able—Delco would have enough business to be able to make fluid, and that they would be able to pay for the investment that they would have to make in order to do that, so he said that they had agreed to pay the four cents per gallon higher than No. 5 and that Delco had agreed to absorb an equivalent amount during the first few years, to make that possible.

Q. Will you tell us when that conversation took place, approximately?

A. In December, I believe, of 1938.

[fol. 5148] Mr. Cox: At this time I should like to offer in evidence a document which has been marked du Pont Exhibit No. 395 for identification, and I will ask the witness be shown the document.

(Said document, so offered and received in evidence, was marked du Pont Exhibit No. 395.)

By Mr. Cox:

Q. This is a document dated December 29, 1938, addressed to J. C. Woodhouse from K. E. Walker.

Is this the document you wrote as indicated by the dictator initials?

A. Yes, sir.

Q. Does this document describe the conference that you just referred to in your testimony?

A. Yes, sir, it does.

Mr. Cox: Now, I would like to read part of this document beginning on the first page:

"Leach said they were using Delco No. 9 fluid in production because of its higher boiling point compared with No. 21 and better stability and low temperature operation compared with No. 5. He brought up the usual illustrations about gassing troubles with No. 5 fluid in taxicabs, trucks and busses and said that use of No. 9 fluid corrected all this. He finally admitted they had no evidence showing that No. 21 would not have been just as satisfactory as No. 9. The reason for using No. 9 eventually came to light. All GM Engineering Units agreed to approve No. 9 for all production so that Delco could afford to produce it at a reasonable price. No. 9 costs about eight cents more [fol. 5149] per gallon than No. 5, which was taken care of by the GM production units paying four cents more per gallon than for No. 5 and Delco taking a four cent loss per gallon. The new equipment costs required to produce No. 9 fluid are to be written off in a year, after which Delco expects to reduce the fluid price to about that of No. 5 fluid which is still higher than the latest No. 21 price. Because of this promise made before No. 21 fluid price was reduced, GM engineers have been reluctant to use No. 21 and have given the boiling point argument for support."

By Mr. Cox:

Q. After this conference, Mr. Walker, did you make, or continue any efforts to sell General Motors No. 21?

A. No, we decided not to continue.

Q. At that point you gave up, is that right?

A. Yes, sir.

Q. Did you continue thereafter to market Lockheed No. 21?

A. Yes, we continued to market the Lockheed No. 21 fluid.

Q. And was it, if you know, sold extensively for use—

A. Yes, it was sold in very large volume for many years.

Q. Was it sold both for service uses and for original installation?

A. Yes, sir, it was.

Q. Now, after that time, and I refer to December, 1938, when you had your conference with Mr. Leach—did you do any more development work on brake fluid in the du Pont Company?

A. Yes, we continued to try to perfect still further No. 21 fluid, and Wagner Electric Corporation also told us that designs of automobiles and trucks were expected to change [fol. 5150] in such a manner that they would require higher boiling fluids.

They expected that this change would take place within, say, two or three years, beginning with the period, as I recall, about 1939.

For that reason we decided to turn to developing fluid with a much higher boiling point than any fluid on the market at that time.

Q. What kind of changes in design did the Wagner people speak of when they made this statement?

A. They were speaking in terms of making smaller diameter brake drums with more powerful brakes along with the smaller diameter, and car speeds were expected to increase, and the design of fenders was changing so that shrouds were being added, making it more difficult to ventilate the brakes.

All of these things were expected to increase brake temperatures in their estimation.

Q. Before you continue to tell us about your work in the brake fluid, will you tell us, if you know, whether in fact these changes in car design ever took place in the way that Wagner predicted they would?

A. Well, of course, fender shrouds were used, and some of the brake drums were made smaller, but as usually happens, the engineers found some ways to increase heat dissipation.

So that the changes that Wagner predicted did not take place to the extent they predicted.

Q. Now, were you successful in your attempt to develop [fol. 5151] the brake fluid with a higher boiling point?

A. Yes, sir, we eventually developed a fluid using a chemical compound which had never been known before, termed, chemically methoxymethoxyethanol, which we called MME, for short.

That solvent, when combined by a similar reaction to the one used for propylene glycol, was reacted with castor oil to give a fluid containing the MME solvent and the MME castor oil reaction product as a lubricant.

Q. About when did you develop this new fluid?

A. This, I believe, took place in the period from 1939 to 1940.

Q. And was there some commercial name or trade name under which that fluid was marketed?

A. Eventually it became marketed as Lockheed No. 21-11.

Q. Was the boiling point of this Lockheed 21-11 higher than the boiling point of Delco No. 9?

A. It was considerably higher. They boiled that at approximately 330 degrees Fahrenheit compared to 260 degrees Fahrenheit for Delco No. 9.

Q. Did you try to sell this new fluid, that is, the Lockheed 21-11, to General Motors?

A. Yes, sir, I again contacted a number of the engineers in General Motors, and described the properties of this fluid.

Q. Were you able to sell the fluid to any of the car divisions?

A. We were not able to sell the fluid to any of the car divisions.

Q. Did they give you any reasons for declining to buy this fluid?

A. Well, at that time they felt that the number 9 fluid had operated satisfactorily, that there was no demonstrated [fol. 5152] need for a fluid which cost more than No. 9 fluid. They did express a desire, perhaps, to see if it would be practical to mix and sell a fluid using MME as a solvent, and we gave them a quotation on the MME to be used by them in making up a fluid.

Q. Were you able to sell them any of that solvent?

A. No, sir, we were never able to sell them any of that solvent.

Q. Do you know where they bought the solvent, if they did buy it?

A. They never bought the solvent. We were the only people who produced it.

Q. In these considerations did they say anything about the higher boiling point of your fluid, of your new fluid?

A. They acknowledged it had a higher boiling point, and that if there were cases where in heavy duty buses you needed a higher boiling fluid than they had, it would be satisfactory.

There were minor points they felt where it was not as satisfactory as Delco No. 9, but they could see that these were minor and that overall the fluid was satisfactory.

Q. Was the price of Lockheed 21-11 higher or lower than the Delco No. 9?

A. At that time?

Q. Yes.

A. I believe at that time the price of 21 was higher than Delco No. 9.

Q. When you say "No. 21", you mean the new solvent with the increased boiling point?

A. No, sir, that was No. 21-11.

Q. I am asking you about 21-11.

A. 21-11, the price was higher.

[fol. 5153] Q. Was 21-11 ever sold commercially?

A. No, 21-11 was sold commercially in considerably smaller volume than No. 21.

Q. Why was the fluid sold in smaller volume?

A. As I mentioned before, the engineers had been busy and found a way of keeping the boiling point from going as high as had been predicted, so there was no need for the higher boiling fluid.

Q. Now, after the war—that is to say, from 1945 on—was your Lockheed No. 21 fluid sold commercially and used extensively?

A. From 1945 on?

Q. After the war.

A. Yes, sir.

Q. It was used for—

A. It was used. I don't know what you mean by "extensively", but it was not sold in nearly as large volume as 21.

Q. Was No. 21 sold in large volume after——

A. In very large volume, I would say.

Q. Was it sold to any automobile companies for original installation?

A. It was still being sold for original installations to Studebaker, Nash and the people I mentioned earlier.

Mr. Cox: At this point I should like to offer in evidence without reading the documents what have been heretofore marked for identification as du Pont Exhibits 389, 390, 391, 392, 396:

(Said documents so offered and received in evidence were marked du Pont Exhibits Nos. 389, 390, 391, 392 and 396.)

[fol. 5154] Mr. Cox: I would also like to offer the documents which were heretofore marked for identification as du Pont Exhibit No. 397.

That is all.

(Said document so offered and received in evidence was marked du Pont Exhibit No. 397.)

Cross-examination.

By Mr. Hoyt:

Q. You say, Mr. Walker, that you made a determined effort to sell your brake fluid to General Motors?

A. I felt I did, yes, sir.

Q. What other companies were making such attempts?

A. What other companies?

Q. Yes.

A. I don't know, beyond the fact that obviously United Carbon & Carbide Chemicals Corporation must have been making attempts. They sold them the fluid.

Q. They sold it through Delco, didn't they?

A. Yes, but Delco was a unit of General Motors.

Q. And Delco was a unit of General Motors?

A. Yes, sir.

Q. Did you ever sell No. 21 to Chrysler?

A. So far as I know, we did not. We were there many times and talked to them about it, but we did not sell them the fluid.

Q. Did you ever sell 21-11 to Chrysler?

A. So far as I know, we did not.

Q. Did you ever sell either 21 or 21-11 to Ford?

A. I believe some of those two fluids was sold to Ford.
[fol. 5155] Q. That was 21, was it?

A. I believe so.

Q. Do you know when that was?

A. I don't know definitely.

Q. Then you sold that to Packard, Studebaker, and Nash, is that right?

A. The sales of fluid to Packard, Studebaker and Nash were made by the Wagner Electric Corporation as were the other sales that I was talking about.

Q. Do you know whether or not those three companies had facilities themselves in producing brake fluid?

A. Ford, Chrysler?

Q. No, Packard, Studebaker and Nash.

A. So far as I know, they did not.

Q. Now, was 21-11 the same as a fluid known as M-376?

A. There was a slight variation in the fluid. No. 21 fluid had propylene glycol in place of the MME. It reacted with the castor oil. The solvent part was the same in each case.

Q. Now, on this Lockheed 21-11, do you know anything about—you testified about the boiling point. What about the freezing point?

A. The freezing point of Lockheed No. 21-11?

Q. Yes. It was below minus 40 Fahrenheit and the viscosity was lower at minus 40 than the Lockheed No. 21.

Q. By 40 degrees Fahrenheit, can you tell me how many days it ran at 40 degrees Fahrenheit?

A. Well, in our test, it ran for five days at 40 degrees.
[fol. 5156] Q. Do you know whether Delco made any tests before?

A. Yes, Delco made tests, and it froze at a shorter time, either three or four days. I don't remember which.

Q. Do you know whether that met General Motors' specifications?

A. No, their specification was, I believe at that time it should be five days, but they conceded later that they felt it was insignificant.

Q. How long did Delco continue to buy raw materials from Carbide?

A. I don't know that.

Q. You don't know whether they stopped immediately or not, is that it?

A. Well, I know that sometime after that I was told that they were buying, but I don't remember the date on which I was told that.

Mr. Hoyt: I am going to read a statement to you and ask you if you ever heard it. This is taken from the minutes of the General Purchasing Committee of General Motors Corporation for February 6th, 1925. It is Paragraph (e) of Government's Exhibit No. 1331 for identification.

Paragraph (e) is headed:

"Purchases from Outside Companies Obtainable from Allied Companies."

"A circular letter has been addressed to all purchasing agents requesting that report on GME-55 covering every purchase of materials from outside companies obtainable from allied companies be made. It was decided that these reports should be summarized and reviewed by the committee at its meetings."

[fols. 5157-6042] Then skipping down to the following paragraph:

"A study will be made to arrive at a method of determining how much lower the price of the successful outside company must be than the price of the allied company bidding in order to justify placing the business outside."

By Mr. Hoyt:

Q. Did you ever hear of any such policy of General Motors at the time you were making sales to them that they would prefer to purchase from allied companies unless the price was substantially lower than outside companies?

A. No, sir, I never heard that statement.

Mr. Hoyt: I offer this excerpt, Government's Exhibit No. 1331 in evidence.

(Said document so offered and received in evidence was marked Government's Exhibit No. 1331.)

Mr. Hoyt: Copies will have to be made for defense counsel. We do not have copies at the present time.

That is all I have.

Mr. Cox: That is all.

(Witness excused.)

[fol. 6043] GEORGE EDMONDS, called as a witness on behalf of the Defendants, having been first duly sworn, was examined and testified as follows:

Direct examination.

Q. You are familiar, are you not, with the charges which are alleged against the defendants in the Complaint in this suit?

A. I have read the Complaint.

Q. Have you ever heard of any arrangement of any kind between the United States Rubber Company and General Motors Corporation or the du Pont Company that they would deal exclusively with each other?

A. No, I have not.

[fols. 6044-6190] Q. Or that they would prefer the products of each other as against their respective competitors?

A. No, sir.

[fol. 6194] LAMMOT DU PONT COPELAND, called as a witness on behalf of the Defendants, having been first duly sworn, was examined and testified as follows:

Direct examination.

By Mr. Potter:

Q. And I believe in 1952 you became president of Delaware Realty & Investment Company?

A. That's right.

Q. Do you hold stock in that company?

A. I do.

Q. And how long have you held it?

A. Well, I received my first stock from the estate of my mother who was one of the original subscribers; and in December, 1926, my father gave me his holdings which represented his original subscription.

Q. Have you as a stockholder of Delaware Realty, at any time had any arrangement or understanding or agreement,

with any member of the du Pont family respecting the holding of that stock and the voting of it?

A. No.

Q. Have your uncles, Pierre, Irene or Lammot ever instructed or advised you as to the voting of your shares of that company?

A. They never have.

Q. Have you, as a member of the Board of Delaware Realty, attended with some degree of regularity the board meetings?

A. Yes, I have been practically to all meetings.

Q. You think to practically all of them since you went on the Board?

A. I believe so. One or two I might have missed.

Q. At any meeting which you attended, Mr. Copeland, either a formal meeting of the Board or an informal meeting of the Board, or a meeting of the officers of that company, have you ever heard the trade relations between the [fol. 6195] du Pont Company, General Motors Corporation and United States Rubber Company discussed?

A. No, they were never discussed; there was no reason why it should be discussed.

Q. Are you a stockholder of Christiana Securities Company?

A. I am.

Q. Where did you acquire your holdings of that stock?

A. I purchased it in the open market.

Q. That is, you purchased it in the open market in the ordinary channels?

A. Yes.

Q. How many shares of that do you hold?

A. I have 96 or 97, I don't recall which.

Q. Have you at any time had any arrangement or understanding, either express or implied, with the other members of the du Pont family, or any of them, with respect to the holding and voting of the Christiana stock?

~~A. Never had such an arrangement.~~

Q. Have you ever heard of any such arrangement?

A. No, I never have.

Q. Have you ever heard of any such arrangement with respect to stock in Delaware Realty?

A. No, I never have.

Q. You were and are a director of Christiana, are you not?

A. I am a director.

Q. How long have you been a director, do you recall?

A. I believe since 1942 I have been a director—1942 or 1944, I have forgotten which, now.

Q. I believe the record shows that you became a director of Christiana in 1940.

A. Oh, 1940, as far back as that.

[fol. 6196] Q. Have you regularly attended the meetings of the Board of Christiana since you went on it?

A. Yes, I have.

Q. At any meeting of that Board has the subject of trade relations between these three so-called manufacturing defendants been discussed?

A. Never.

Q. Now, it appears also from the record, Mr. Copeland, that you became a director of the du Pont Company in 1942, and that you went on the Finance Committee of the du Pont Company in 1943?

A. I believe that is right.

Q. What other position do you hold with the du Pont Company?

A. I am the secretary of the company.

Q. So that at the present time you are a director, a member of the Finance Committee, and secretary of that corporation?

A. That is right.

Q. When were you first employed by the du Pont Company?

A. In September 1929.

Q. Have you continued in the employ of that company fairly consistently since that time?

A. Yes, except for a short leave of absence during the NRA, when I was with that organization.

Q. Did you ever attempt directly or indirectly to use the stock ownership, du Pont Company's stock ownership in General Motors in order to further sales of du Pont products to General Motors?

A. No.

Q. Have you ever sought the assistance of any person who was employed or connected with General Motors and

at the same time employed or connected with the du Pont Company to further the sales of du Pont products?

A. Well, there was one case which I might mention. It is [fol. 6197] the only case at all that comes anywhere near that. Back in 1942, I was in the finishes division as an assistant, administrative assistant to the general sales manager, and the director of sales asked me whether I would get hold of my friend, Mr. Henry du Pont, and ask him to try to put in a good word for du Pont paints for a plant that the North American Aviation Corporation was building.

Q. When was this, Mr. Copeland?

A. I think in 1942 or 1943, just about the beginning of the war.

Q. About the beginning of the war?

A. It was an aviation plant being built for the war.

Q. As I understand it, at that time you were in the employ of the du Pont Company as the assistant to the sales manager of the Fabrics and Finishes Division?

A. Yes, the Finishes Division of the Fabrics and Finishes Department.

Q. Who asked you to call H. B. du Pont?

A. Mr. Zintle, who was then the director of sales, my superior.

Q. Director of sales at that time?

A. Yes.

Q. Since going on the Board of the du Pont Company in 1942 and on the Finance Committee in 1943, have you regularly attended the meetings of those two bodies?

A. I have.

Q. At any meeting which you have attended, have you heard the subject of trade relations between the du Pont Company and General Motors and U. S. Rubber discussed?

A. No, I have not.

Q. Except in the one instance which you have just mentioned, which occurred when you were assistant to the sales manager, have you ever attempted to induce the General [fol. 6198] Motors—

A. May I correct my record? I am way off on my date there. That wasn't 1942 at all because I was no longer with the Finishes Division after 1941. That must have been back around 1939.

Q. Now, let's see if we can straighten that out, Mr. Copeland.

This instance which you spoke of took place when you were assistant to the sales manager of Fabrics and Finishes?

A. Yes. I transferred from that work in September of 1941, and I am sure it was considerably prior to that time. I would think perhaps it was 1940, or perhaps even 1939.

Q. And on that occasion, then, as I understand it, you simply called H. B. du Pont and asked him if he would put in a word for du Pont paint, is that right?

A. That is right, yes.

The Court: The Court will now recess.

[fol. 6199] Q. Mr. Copeland, before the lunch recess, I think I brought out that you were a director of the du Pont Company, a member of the Finance Committee, and also were a secretary of that corporation?

A. That's right.

Q. And has your attendance at the meetings of the Board and the Finance Committee been regular or irregular?

A. Very regular.

Q. At any meeting of either of those bodies which you have attended, have you heard the matter of trade relations between the du Pont Company, General Motors or United States Rubber discussed?

A. No, never.

Q. Have you in any capacity, at any time except this one instance which you spoke of this morning, when you were assistant to the sales manager, ever attempted to influence General Motors to buy from the du Pont Company?

A. No, I never have.

[fol. 6200] Q. Nor to have the du Pont Company buy from General Motors?

A. No, sir.

Q. Has anybody ever requested you to use your good offices to influence trade relations between those two companies?

A. No, except that one minor example, nobody ever has.

Q. Well, in respect to the United States Rubber situation, Mr. Copeland, have you ever attempted to influence the du Pont-U. S. Rubber trade relations?

A. I never have.

Q. Has anybody in the du Pont Company ever requested you, or asked your assistance, in obtaining business for the du Pont Company from the United States Rubber Company or vice versa?

A. No, they never have.

Q. Have you at any time in any capacity in which you held with the du Pont Company, taken any action which was designed or intended to cause the du Pont Company to refrain from competing with either of the other two companies?

A. No, I have never taken any such action.

Q. Now, it appears, Mr. Copeland, from the record in the case that you are one of the so called du Pont representatives on the General Motors Board, is that correct?

A. That is correct.

Q. And what other positions have you held with the General Motors Corporation?

A. I have been a director of General Motors since 1944. I was made a member, elected to the position of member of the committee upon audit, in 1946, in the spring of 1946, and I resigned from that committee and became a member of the Financial Policy Committee in 1949.

[fols. 6201-6202] Q. And have you, as a member of the Board and as a member of the Financial Policy Committee, attended regularly the meetings of those two bodies?

A. Up until this spring my attendance has been very regular.

Q. At any meetings of those two bodies, have you heard the subject of trade relations between General Motors and United States Rubber or du Pont discussed?

A. I have never heard such matters discussed.

Q. During the time that you have been associated with General Motors have you ever attempted to influence that corporation in its trade relations with either of the other manufacturing defendants?

A. No, not in any way.

Q. Has anybody connected with the du Pont Company or any member of the du Pont family or anyone else ever

requested you to use your influence to improve trade relations between those companies?

A. No, they never have.

[fol. 6203] Q. Have you read the complaint in this case?

A. Yes, I have.

Q. That is, the amended complaint?

A. The amended complaint.

Q. Are you familiar with the offenses charged in the amended complaint in this case?

A. Yes, I am.

Q. In paragraph 9 of that complaint it is charged that you have been a director of one or more of the corporate defendants and that you have authorized, ordered and done one or more of the acts alleged to constitute the offenses charged.

I would like to know from you whether that allegation is true or false.

A. It is absolutely false.

Q. Have you ever taken any action to restrain commerce between these corporations?

A. Not to my knowledge.

[fols. 6204-6234] Q. Now, in substance, Mr. Copeland, the amended complaint charges that there was a conspiracy, understanding or agreement pursuant to which the du Pont Company, General Motors Corporation, and the United States Rubber Company were to prefer each other in their purchases of products, and that they would prefer the products of each over their respective competitors.

Have you at any time had any knowledge or information concerning any such agreement, understanding or conspiracy?

A. I never heard of any such agreement. I have no knowledge of it, and I have never seen any indication of its existence.

Q. The amended complaint likewise charges, Mr. Copeland, that there was a conspiracy, agreement or understanding entered into pursuant to which each of the three companies which I have mentioned were to refrain from competing with each other.

Have you at any time had any knowledge or information of any such conspiracy, understanding or agreement?

A. No, I never have.

[fol. 6235] HENRY B. DU PONT, called as a witness on behalf of the Defendants, having been first duly sworn, was examined and testified as follows:

Direct examination.

By Mr. Nichols:

Q. Have you been a fairly regular attendant at meetings of the Board and committees of General Motors since you have been on those bodies?

A. Yes, I have been a very regular attender.

Q. During any meeting of any of those bodies which you have attended, have you heard any discussion of trade relations of General Motors Corporation?

A. No. Trade relations were never discussed at any of those meetings.

Q. Are trade relations a matter that normally come before the Bonus and Salary Committee in any connection?

A. No, they never do come before the Bonus and Salary Committee. Bonus and Salary Committee doesn't cover that phase of General Motors' operations.

[fol. 6236] Q. As a director of General Motors Corporation, have you ever heard any discussion of the trade relations between GM and the du Pont Company?

A. No, I never have.

Q. Or United States Rubber Company?

A. No.

Q. Or any other company?

A. No. Well, possibly one exception, the only thing that I ever remember having come before the Board of General Motors were some very large steel deals where General Motors, to get sufficient steel, had to help finance steel expansion on the part of some very large steel companies.

That was a financial matter where the Board was giving its blessing, so to speak, on the management committing the corporation to many, many millions of dollars.

Q. Because of the large sums involved?

A. Large sums?

Q. Yes.

A. Well, the last one was—

Q. I am not asking for a figure, but you say because of the large sums involved?

A. Oh, yes, because of the large sums. The last one was something like \$25,000,000.

Q. During your connection with General Motors Corporation in any capacity, have you ever been asked by anyone in the United States Rubber Company to lend your assistance in promoting or effecting sales of Rubber Company products to General Motors Corporation?

A. No, on no occasion whatsoever.

Q. Have you ever been asked to do any such thing by anyone in the du Pont Company?

A. Between du Pont and General Motors?

Q. As between du Pont and General Motors Corporation?

A. No, except you might say that this North American [fol. 6237] Aviation matter might be in that category. That was spoken of by Mr. Copeland in his testimony. But I have never had anything in connection with General Motors directly.

Q. You are referring to the paint incident that Mr. Copeland testified to this morning?

A. Yes, that is right.

Q. What did you have to do with that incident?

A. Well, at that time North American Aviation was expanding its production of fighter and trainer planes, and had to build a new plant down at Dallas, Texas, and the Air Force had made a deal with us—I mean with North American—to build a big new plant with RFC funds.

I guess somebody in our paint division, or fabrics and finishes division is the correct name, heard about it and hoped that they could get in on the business. I got this telephone call from Mr. Copeland, asking me whether I could talk to the president, whom I knew very well, and see whether I couldn't put in a good word for him.

Q. Who was the president?

A. Mr. Kindelberger.

Q. What did you do in response to that request, in response to Mr. Copeland's request?

A. Well, I called up "Dutch"—Mr. Kindelberger—and told him that our paint department would like to be considered for the business, and I said I hoped that he could see that at least they got fair consideration.

Q. Did you ever talk to Mr. Kindelberger after that, or otherwise follow up the incident to see whether du Pont got the order for the paint?

A. No, I never did. I passed that information on to him, and that was that, and it was up to the du Pont people to go ahead and sell the paint on the basis of price, quality, service, and whatnot.

[fol. 6238] Q. What was the relationship, if any, between North American Aviation and General Motors at that time?

A. General Motors Corporation owned, I think it was approximately 29 per cent of the common stock of North American Aviation.

Q. Did you have any direct connection with North American Aviation at that time?

A. Yes, I had been a director for many years, back to about 1934.

Q. Apart from that one episode, Mr. du Pont, can you recall any other instance where you were asked by anyone in the du Pont Company or any member of the du Pont family to use your good offices in promoting the sale of du Pont products to General Motors Corporation?

A. No, I really don't recall. I don't believe I ever did.

Q. Or to United States Rubber Company?

A. No.

Q. And you have been a director of the du Pont Company for some years, have you not?

A. Since 1934, I believe.

Q. And more recently a member of its Executive Committee?

A. Yes, I was elected a member of the Executive Committee along in the autumn of 1939.

Q. And you continue to hold both those positions at the present time?

A. Yes, that is correct.

Q. Are you a stockholder in the Christiana Securities Company?

A. I own a few shares of preferred stock, but no common stock, I believe.

Q. Have you personally ever owned any common stock in Christiana Securities Company?

A. No, not to my recollection.

[fol. 6239] Q. You have, however, been a director and officer of that company, have you not?

A. Yes, that is correct.

Q. Have you been regular in your attendance at meetings of the Board?

A. Yes, very regular.

Q. Can you recall the subject of trade relations ever having been discussed at any meeting?

A. No, trade relations never were discussed in Christiana meetings.

Q. And particularly trade relations between General Motors, du Pont and United States Rubber, or any of those companies?

A. No, that was a subject that was never discussed.

Q. I believe the record shows that you were one of the original subscribers to the stock of Delaware Realty & Investment Company, is that correct?

A. Yes, that is correct.

Q. Have you continued to be a substantial stockholder in that company?

A. Yes, I have.

Q. Have you held any official position with that company?

A. Yes. I was one of the original directors. I served as a director until sometime in 1934, at which time I resigned as a director.

I was elected a director again, I believe it was 1938 or 1939—the record will show it—and I have been a director ever since.

I was a vice president of Delaware Realty & Investment Company for a number of years. I have forgotten just what year I was elected. Then I was elected president of Delaware Realty, I think it was in 1943.

Q. Is the stock which you hold in Delaware Realty under any restriction by virtue of any agreement or understanding [fol. 6240] with other members of the family?

A. What do you mean by restriction?

Q. Are your hands tied in dealing with it or as to how you should vote it in any way?

A. Are my hands tied?

Q. Yes.

A. No.

Q. Have you ever heard of any agreement or understanding among any holders of Delaware Realty stock which limited their right to dispose of it?

A. No.

Q. Or how they should vote it?

A. No.

Q. Have you ever received any instructions or advice regarding your Delaware Realty stock from Mr. Pierre, Mr. Irene or Mr. Lammot du Pont?

A. No, I never have.

Q. With reference either to the holding of it, the disposition of it, or the voting of it?

A. No, neither those gentlemen nor anybody else messed into my affairs.

Q. You feel then entirely free to dispose of it and vote it any way you want, is that correct?

A. Absolutely, and I have.

Q. And you know of no restriction that has ever pertained to it?

A. Never any restriction so far as I am concerned. I never heard of any others.

[fol. 6241] Q. You have read the Complaint, of course, have you not, in this case?

A. Oh, certainly.

Q. You are familiar with the charges?

A. Yes.

Q. Which are alleged against the defendants.

Have you at any time been aware, or have you ever heard of any arrangement between the du Pont Company and General Motors that they would deal exclusively with each other in the purchase of each other's products?

A. No, I never heard of any such agreement.

Q. Or that they would give preference to each other's products over their respective competitors?

A. No.

Q. Have you ever heard of any such arrangement which affected the purchase and sale of products as between the [fol. 6242-6282] du Pont Company and United States Rubber Company?

A. No, the same is true of the Rubber Company.

Q. Or as between General Motors and United States Rubber Company?

A. No.

Q. Have you ever heard of any arrangement or agreement that these companies would stay out of each other's fields of business?

A. I never heard of any such agreement.

Q. Or that they would not compete?

A. I never heard of any agreement that they should not compete.

Q. You recall the allegation in paragraph 9 of the amended Complaint?

A. I can't keep paragraph 9 in my head; which one is that?

Q. Well, it alleges in substance that you have been a director in various defendant companies, and that you have used your position in these companies to authorize, order, or do acts which constitute the offenses alleged in this case?

A. Yes, I remember now.

Q. Are those allegations true or false?

A. They are completely false.

[fol. 6283] Cross-examination:

By Mr. Harris:

Q. Now, Christiana holds three million, or did before the one stock split, 3,050,000 shares of E. I. du Pont de Nemours, and Delaware holds 304,000, or together, 30 per cent of 11,000,000 odd shares.

What, if anything, did Christiana do with the shares of stock in the du Pont Company that it held, to your knowledge?

A. May I ask what you mean by do with them?

Q. Did you vote it?

A. Yes, we voted those shares at the annual meetings of the du Pont Company.

Q. And that was done under the instruction, was it, of the Board of Directors?

A. Yes, that is right.

Q. You know that to be a fact yourself, don't you?

A. Yes. We authorized certain people to vote the stock in person or in proxy at the annual stockholders' meeting of the du Pont Company.

Q. Yes, sir, and when you voted the stock in the annual meetings of the du Pont Company, I think it is in evidence but I will ask you whether that was always done for the management.

A. There was a period, I think, when there were no instructions, but for many years the people were authorized to vote the stock in favor of the management.

[fols. 6284-6293] Q. And if they were not so authorized specifically, they did it anyway, did they not, as far as you know?

A. As far as I know, yes.

Q. Mr. du Pont, did you ever have occasion to consider before you came to the witness stand whether the holding of that stock that we have just talked about, that du Pont stock by Christiana, and the holding of Christiana stock by Delaware, by the du Pont family, constituted any extended control of General Motors?

Perhaps, before putting the question, I should say that the du Pont Company held 10,000,000, or 23 per cent, of General Motors Corporation stock.

Did you ever have occasion to consider whether that, to any extent, was control of General Motors by the du Pont Company, du Pont individuals, Christiana, Delaware?

A. No, I never have had any occasion to consider that in any way control of the company.

[fol. 6294] Redirect examination.

By Mr. Nichols:

Q. I have one or two questions on redirect examination.

Mr. du Pont, you testified on your direct examination that there are not and never have been any restrictions on your right to deal with your Delaware Realty stock in any way or to vote it as you please.

Do you recall that testimony?

A. Yes, that is true.

Q. On the cross examination you were asked whether or not you had ever sold any shares of your Delaware Realty stock, do you recall that?

A. Yes.

Q. And you replied that you had not?

A. That's right.

Q. And will you state, please, the reasons why you have not sold any of your Delaware Realty stock.

A. The reasons why I have not sold it?

Q. That's correct.

A. Well, I never considered selling the stock. I might say the underlying security in Delaware Realty & Investment was the du Pont Company. I certainly had great confidence in the future of the chemical industry and the du Pont Company in particular.

The du Pont Company had done mighty well over the years, and it appeared like a mighty good investment to retain, so I saw no reason for selling it from that standpoint, but even if I had considered selling it there were [fol. 6295] two pretty serious obstacles, or there would have been two pretty serious obstacles.

One, there is no market for Delaware Realty & Investment stock, if I had wanted to sell it, and I would practically have to force it on the market through a private sale, and at quite a penalty, pricewise, and then there is another very big factor, and that is the terrifically high capital gains tax that I would have to pay, as I say, and I never thought it would be good business to sell it, and if I had tried to sell it, there would have been those two great big obstacles.

Q. One more question. Are the awards by the bonus and salary committee of the General Motors Corporation of which you are a member, in any way influenced by the recipients' attitude toward the du Pont Company?

A. That is a surprising question to be asked. Why, no, of course, not. Why should it be?

Would you repeat the question again?

Mr. Nichols: Read the question, please.

(Record read by the reporter.)

The Witness: A. Oh, no, absolutely not.

[fol. 6296] PIERRE S. DU PONT, III, called as a witness on behalf of the Defendants, having been first duly sworn on his oath, was examined and testified as follows, to-wit:

Direct examination.

By Mr. Nichols:

Q. Mr. du Pont, you are one of the defendants in this case, are you not?

A. Yes.

Q. You are appearing in your individual capacity at this time?

A. That is correct.

Q. Will you state, please, when and where you were born?

A. I was born outside of Wilmington, Delaware, on January 1, 1911.

Q. You were about four years old then in 1915 when Christiana Securities Company or its predecessor was formed?

A. Yes, sir, if my arithmetic is correct.

Q. Where do you live at the present time?

A. In Rockland, Delaware, a small town outside of Wilmington.

Q. You are a son of the late Lammot du Pont, are you not?

A. I am.

Q. And, therefore, of course, a nephew of Pierre and Irene du Pont?

A. That is correct.

Q. What schools and colleges have you attended, Mr. du Pont?

A. I graduated from a local country day school in Wilmington in 1928; then went to Phillips Exeter Academy for one year; then went to M.I.T. and graduated with a Bachelor of Science degree in 1933.

Q. Have you been employed since that time?

A. I started with the du Pont Company on January 2, 1934.

Q. You were elected a director of the du Pont Company [fol. 6297] October 18, 1948, according to the records in this case, is that correct?

A. To the best of my recollection.

Q. You are also a director of Delaware Realty & Invest-

ment Company, Christiana Securities and Wilmington Trust Company, are you not?

A. Yes.

Q. Do you recall the approximate date, or at least by years, when you went on those several Boards?

A. Yes. I went on Delaware Realty Board, I believe, in 1943. I went on the du Pont Board in October, 1948. I was elected to the Christiana Board in August of 1952, and was elected to the Board of the Wilmington Trust Company in January of 1952.

Q. Have you ever been a director of the General Motors Corporation?

A. No, sir, I have not.

Q. Or of the United States Rubber Company?

A. No, sir.

Q. Have you ever had any connection with those two companies?

A. No, sir.

Q. The record also shows, Mr. du Pont, that you are a stockholder in the Delaware Realty & Investment Company, is that correct?

A. That is correct.

Q. How were your shares of stock in that company acquired?

A. They were acquired on the expiration of a trust that was set up by my father.

Q. Do you remember about the year when the trust expired?

A. 1943, as I recall.

Q. Have you continued to hold the shares?

A. Yes, sir.

Q. Was the acquisition of the shares accompanied by any agreement or understanding between you and any other members of the du Pont family holding Delaware [fol. 6298] stock relating to or in any way affecting your or their disposition or voting of the stock?

A. No, sir, I had no advice or instructions from anybody.

Q. Have you ever heard of any such agreement?

A. No, sir.

Q. Or understanding, or arrangement?

A. None, to my knowledge. It is preposterous.

Q. Were you ever instructed or advised, by your father

or either of your two uncles, Pierre and Ireneé du Pont, as to the holding or disposition of your shares of Delaware Realty stock?

A. No, sir, I was never advised one way or the other.

Q. Or with respect to the voting of that stock?

A. No, sir, I received no advice.

Q. It also appears from the record that you are a holder and beneficiary of common stock in Christiana Securities Company.

A. That is right.

Q. What is the extent of your interest in the stock of that company, and how is it held?

A. Well, I have got two shares at the moment in my own name, and then I am a beneficiary of two trusts, one of which has Christiana in it, and which I have no control over the principal.

The other one is a trading account that was set up by some of my brothers and sisters, and myself, which is in the form of a trust, of which I am trustee.

Q. What is the approximate number of shares in each of those two trusts that you mentioned?

A. The trading account at the moment has got, I think, 140 shares in it, and there are four beneficiaries. The other trust, I believe, has 600.

Q. That is the trust with respect to which you have a [fol. 6299] lifetime interest only, is that correct?

A. That is correct.

Q. Have you at any time in the past owned personally and directly any more than two shares of the common stock?

A. Sure. Back in the early '30's I bought and sold Christiana stock, common stock on the market. I did a little, shall we say, speculating with it, which turned out to be rather profitable. One time I had quite a lot, and then I sold it down to nothing, and recently acquired two shares.

Q. Did you ever feel any obligation to consult anybody about whether you would acquire or sell any of that stock?

A. No. I was hardly in a position as I was running around the countryside working on various du Pont plants, and I didn't think to consult anybody. I wouldn't spend the money to call Wilmington to get advice. I had my own ideas and proceeded.

Q. I am asking whether there was any obligation to call them?

A. No.

Q. With respect to any Christiana stock which you have ever owned and that now amounts to two shares, you tell me?

A. That is right.

Q. That is, shares in your control, have you ever been under any obligation, moral or otherwise, with respect to voting the shares at the behest of anybody?

A. No, sir.

Q. Have you ever received any instructions or advice from any member of the family, including your father or either of your uncles, as to your retention or disposition or voting of any Christiana stock?

A. No, sir.

[fol. 6300] Have you been a regular attendant at the Board meetings of du Pont, Delaware Realty, and Christiana Companies?

A. Yes, sir.

Q. Have you ever heard the subject of trade relations discussed at any of those meetings?

A. Never.

Q. You have been employed, Mr. du Pont, in the du Pont Company's sales divisions or departments at various times, have you not?

A. Yes, sir.

[fol. 6301] Q. What products have you handled?

A. Well, I sold, directly sold high tenacity rayon, which du Pont calls "Cordura," and I also sold nylon directly.

U. S. Rubber and General Motors were two of the many customers that I had when I was in those activities. At the present time I have supervision over the sales of rubber chemicals and "Neoprene."

Q. In what capacity is that?

A. As assistant director of sales.

Q. You have, I take it, made direct and personal calls on General Motors and United States Rubber Company in the merchandising of the products?

A. Yes, sir. I called on them quite regularly.

Q. Has your method of effecting sales, or your sales technique with respect to those two companies differed in any respect from your general sales approach to other customers?

A. Yes, it did. I tried a lot harder. They were tough customers to do business with, and you just didn't walk in and get an order. You had to argue, argue them out of an order, and that was difficult.

Q. Are you saying that if there was any difference it was because General Motors and the Rubber Company were more difficult to sell?

A. They were harder to convince of the advantage of using du Pont products, yes.

Q. Did anyone in the du Pont Company ever suggest to you that you should use a different technique or some different arguments in your sales efforts with General Motors or United States Rubber Company?

A. No, sir, no one suggested anything.

Q. Did you personally ever request any person in the [fol. 6302] du Pont Company, or any member of the du Pont family who was connected with General Motors Corporation to use his good offices or his efforts in your behalf in selling du Pont products to General Motors Corporation?

A. No, sir. I never would have asked anybody's help. In the first place, I was more or less under test to see whether I had any managerial skill and any selling skill; and if I couldn't do the job myself, why, then, I guess I wasn't a very good salesman. So I stuck to it by myself.

Q. Did you ever seek to enlist the good offices of anyone in the United States Rubber Company or any du Pont family member in your sales efforts with United States Rubber Company?

A. No, sir.

Q. Mr. du Pont, do you know or have you ever heard of any arrangement whatever, expressed, implied, formal or informal, or otherwise, between the du Pont Company and General Motors Corporation that those two companies would buy exclusively the products of each other?

A. No, sir, I never heard of such a thing.

Q. Or would give preference to the products of each other in their purchases?

A. No, sir.

Q. Have you ever heard of any such arrangement between du Pont and the Rubber Company?

A. No, sir.

Q. Or between United States Rubber Company and General Motors Corporation?

A. I have never heard of any such thing.

Q. Have you ever heard of any arrangement of any kind that the United States Rubber Company would not compete with du Pont in any fields of enterprise?

A. No, sir.

Q. Or that du Pont would not compete with United States [fols. 6303-6306] Rubber Company?

A. No, sir, I never heard of such an agreement or arrangement.

Q. Or that General Motors and the Rubber Company would stay out of any fields in which du Pont was operating?

A. I never heard of any such thing.

Q. Or the other company was operating?

A. No, sir.

Q. In other words, have you ever heard any intimation of any kind with reference to any division of fields or agreements not to compete between any of these three companies?

A. No, sir, I haven't ever heard of any such thing.

Q. Are you positive about that?

A. Most positive.

[fol. 6307] Cross-examination.

By Mr. Houchins:

Q. Were there additional shares of Christiana stock purchased by you from time to time for your other children?

A. Sure, there have been off and on, and he has been given some.

Q. In those cases where such stock is purchased by you for your children, is it held in their name directly?

A. Yes, it is, directly in their name.

Q. Who votes those shares?

A. Nobody. They are minors. I don't believe they can vote.

Q. You don't vote them, at any rate?

A. I have no right to vote them.

Q. Mr. du Pont, I refer to Government's Exhibit No. 1222.

A. May I take a look at it?

Q. Yes. This is certain answers supplied by the Delaware Company to interrogatories submitted to them by the Government. These answers indicate, on page 3, that in the years 1944, 1946 and 1947 you were appointed by the Board of Directors of Delaware Realty Company to vote Delaware stock at Christiana stockholders' meetings.

Do you recall that?

A. Sure.

Q. I notice that you are listed there as an alternate. Do you recall that you ever performed that duty of voting Delaware stock at Christiana meetings?

A. I may have once.

Q. Do you remember what year that was?

A. No, sir, I don't, but being a third alternate it is kind of hard to remember whether I was an active participant or not. I was there.

Q. You voted only once, as you recall it?

A. That is right, because the other two weren't there. I think I voted once; I am not certain.

[fol. 6308] Q. You voted only once, but you don't recall which year you voted?

A. No.

Q. On that occasion when you did vote, did you vote for the management slate, if you recall?

A. Sure.

Q. Were you instructed by the Board of Directors of Delaware to vote for the management slate?

A. I believe so. Yes, it is in the record. The resolution is in the record. I think we were instructed to vote for the management. I would have, anyhow, instructions or not.

Q. Where were Christiana stockholders' meetings held?

A. In Wilmington.

Q. In what building, if you know?

A. The du Pont building.

Q. Is the same true for Delaware?

A. Sure. There are not many office buildings in Wilmington except the du Pont buildings.

Q. Mr. du Pont, I refer to Government's Exhibit No. 1303, which is a chart which has been introduced in evidence in this case, which sets forth certain stock relationships among the various defendants.

I ask you if you are familiar or if you are aware of the fact that members of the du Pont family own 100 per cent of the outstanding stock of Delaware Realty. Are you aware of that fact?

A. Yes, I am, but I don't know as I would say 100 per cent, because I don't know what the other people who have been stockholders might have done. I would guess that it is close to 100 per cent, but I don't know every detail.

Q. Are you aware of the fact that the Delaware Realty Company, together with members of the du Pont family, own about 67 per cent of the stock of Christiana?

A. I know it is somewhere in that range, yes, sir.

[fol. 6309] Q. Are you aware of the fact that Christiana Securities Company together with Delaware owns about 30 per cent of the outstanding common stock of the du Pont Company?

A. I think it is general knowledge. Sure, I know it also.

Q. You know, I assume, that the du Pont Company owns approximately 23 per cent of the common stock of General Motors?

A. Yes, sir, I am aware of that.

Q. Having those things in mind, Mr. du Pont, in your opinion as a director of Delaware Realty and the du Pont Company and of Christiana, are these stock relationships that I have just mentioned such, in your opinion, as to enable Delaware Realty to exert any degree of control over the du Pont Company and over General Motors?

By Mr. Houchins:

Q. Did you get the question?

A. Yes, sir, I got the question. I don't think it exerts any control over any of the companies.

Q. Who is Mr. E. H. Tinney?

A. He is assistant secretary or secretary of Delaware Realty and also has the same position, I am not certain

which he is, in Christiana, and also a personal employee of Mr. Irene du Pont.

Q. Has he held his position in Delaware Realty for a considerable amount of time?

A. He has been there as long as I have been. I don't know anything about before that.

Q. That would be from when?

A. 1943.

Q. Mr. du Pont, I have just shown you what I have tentatively marked as Government's Exhibit No. 1335 for identification.

This appears to be a memorandum dated March 29, 1944, on the letterhead of Delaware Realty & Investment Com-[fol. 6310] pany, addressed to various people, among them yourself. You are listed second.

The document, you will note, on the last page is signed by Mr. E. H. Tinney. Do you recall receiving this document from Mr. Tinney?

A. Yes, I think so. My memory isn't too good, but I am sure if I am on here as getting a copy, I got one, and I must have seen it.

Q. This is a memorandum from Mr. Tinney, in which he apparently discusses with you and other addressees listed on the front what has been a proposal to liquidate Delaware Realty & Investment, I gather from the context.

On page 6 of the document, Mr. Tinney, in summarizing his feelings, states the following as the reason apparently against liquidation:

"Delaware Realty, at least to some extent, facilitates control of the du Pont and General Motors industries. While liquidation would not eliminate this immediately, it would weaken it; more particularly so with the passage of time."

I ask you, Mr. du Pont, if you agree with the statement in this memorandum.

A. Well, I don't—I don't know whether Delaware Realty facilitates the control of du Pont or General Motors or not because I don't think it has any bearing in this situation.

Q. I gather then you disagree with Mr. Tinney's statement, is that correct?

A. Well, I don't know what "facilitates control" means. You either have control or you don't.

Q. Mr. Tinney is addressing the letter to various people, and you are one of them.

A. That is right.

[fols. 6311-6329] Q. Do you disagree with this statement—

Mr. Cox: The witness has testified he doesn't understand what Mr. Tinney meant. I object to the question. I think it is argumentative.

The Court: Overruled.

By Mr. Houchins:

Q. Will you answer the question, please?

A. Will you repeat the question, please?

Q. I asked you, in view of the fact Mr. Tinney has addressed that letter to you, among other people, whether or not you agree with Mr. Tinney's statement.

A. I don't believe I do.

Q. Did you ever indicate your dissent to Mr. Tinney to that statement?

A. Well, no, I don't think I did.

I would like to point out that this question of the dissolution of Delaware Realty is under constant study, and this is just one of two or three studies that have been made since I have been on the Board, and presumably there have been more before that. I don't know.

Q. I am not sure I got your answer. I gather you said you did not indicate your dissent to Mr. Tinney.

A. I don't believe I did because it was just a routine report of Mr. Tinney's thoughts.

Mr. Houchins: If the Court please, I offer this document in evidence as Government's Trial Exhibit No. 1335.

(Said document, so offered and received in evidence, was marked Government's Exhibit No. 1335.)

[fol. 6330] MAX N. NICKOWITZ, called as a witness on behalf of the Defendants, having been previously duly sworn, resumed the stand, was examined and testified further as follows:

Direct examination (continued).

By Mr. Neitzert:

Q. Are you the same Max N. Nickowitz who testified before in this cause and before this Court on Monday, April 20, 1953, through Wednesday, April 22, 1953?

A. Yes, I am.

Q. And you have been director of sales of the Fabrics Division of the du Pont Company since 1944?

A. Correct.

Q. Now, I direct your attention to du Pont Exhibit No. 228 which has previously been offered in evidence in this case, and which was identified by you when you were last on the stand, a chart or diagram showing the general classes of products manufactured and sold by the Fabrics Division of the Fabrics and Finishes Department of du Pont Company.

[fol. 6331] I ask you to state, Mr. Nickowitz, which of these products are sold in competition with substantially identical products manufactured and sold by the United States Rubber Company?

Mr. Harsha: Can we have the date of this you are referring to?

Mr. Neitzert: 1952 or 1953. We are going to cover the entire period.

By Mr. Neitzert:

Q. Suppose you make your answer cover the current period.

A. Those products are "Fabrilitite," vinyl-plastic coated fabrics, rubberized fabrics, "Fairprene," synthetic-rubber coated fabrics, "Fairprene" synthetic rubber sheet stock without fabric backing, protective and water stop "Neoprene" coated fabrics, "Fairprene" industrial cements, "Rug Anchor" and "Teal."

Q. Does the United States Rubber Company make a combined fabric similar to "Teal"?

A. No, they do not. However, they offer in competition with "Teal" a vinyl coated knit back fabric.

Q. Let's just clarify that a little bit. You have already testified that "Teal" is a relatively expensive fabric, Mr. Nickowitz. In the year 1948, for example, what was your price of "Teal" to the Fisher Body Company?

A. It was approximately \$2.63 per 54 inch yard.

Q. That was cotton backed?

A. That was cotton backed. They also buy an "Orlon"-faced material which we supply in two colors. One is natural—that is an undyed face—and that product sells for \$5.15 per 54-inch yard; and we also supply them with a black [fol. 6332-6358] dyed "Orlon"-faced material which sells for \$5.80 per yard.

Q. Well, now, just for a basis of comparison, what was your price of say 5950 grade, 50 inch "Fabrilit" in 1948?

A. You mean 69?

Q. Yes, 6950.

A. That was about \$1.35 per yard.

Q. About half the price of cotton "Teal"?

A. Yes.

Q. Is the fabric that the United States Rubber sells in competition with "Teal," a fabric like your "Fabrilit"?

A. Yes, it is vinyl coated.

Q. So that as far as the "Teal" is concerned, the competitive product is really not exactly the same?

A. That is correct.

Q. That is not true, is it, of these other products?

A. Correct.

Q. And am I correct in understanding you to say that beginning with the box on Exhibit No. 228 which bears the name "Fabrilit", vinyl plastic coated fabrics, and extending to the right-hand side of the page, you have competition from the United States Rubber in selling all of those products except Ventube and, in the respects which you explained, "Teal"?

A. And the unsupported vinyl "Fabrilit", the one immediately to the right of the box labelled "Fabrilit", vinyl plastic coated fabric."

[fol. 6359] Q. Now, you have testified that one of the other fields in which you have lost business to the United States Rubber Company since 1933 is the automotive upholstery field.

A. Yes.

Q. When did United States Rubber Company get into that field?

A. The United States Rubber Company entered the automotive upholstery field in 1934.

Q. Had the United States Rubber Company been selling coated fabrics to the automotive industry prior to that?

A. Yes, they had been selling rubberized products to the automotive industry as far back as I can remember, but the sales to the industry prior to that was for the replacement in the auto top field, and I do not recall that they ever had, prior to that, any original equipment business on top material.

Q. Did the du Pont Company have any appreciable amount of business in the replacement field?

A. That used to be a very large factor back in the days before the closed car. That replacement business was very large, but in recent years it has been a very minor portion of our business.

Q. What was the field of rubber-coated fabrics used by the automobile industry that was important to the du Pont [fol. 6360] Company?

A. Upholstery trim, side curtains and things of that kind?

Q. Is that the field that the U. S. Rubber Company went into for the first time in 1934?

A. Yes, sir.

Q. What success did the U. S. Rubber Company have in that field?

A. Well, they have made a lot of progress in that field. They started in in 1934, and the first time we felt the impact of their competition was with Chevrolet Commercial when they introduced rubberized upholstery material, and got about ten per cent of the business. Prior to that time we had been selling pyroxylin coated fabric, and with the beginning of that, they have progressively moved on in that industry to the point where last year we estimated that the United States Rubber Company had gotten almost as much business as we had.

Our sales to the automotive industry in that category were about, as I recall, five million dollars, and theirs about four million dollars or four million two hundred thousand dollars. We have it in our annual survey.

Q. Your report shows du Pont sales five million and U. S. Rubber four and a half million?

A. Yes.

Q. In 1933, they had none, is that correct?

A. That is correct.

Q. You mentioned a loss of business at Chevrolet Commercial. You said you lost ten per cent, I believe, in 1937. You had previously had all of that business?

A. Yes, sir.

Q. What happened since you lost that ten per cent?

A. Well, the United States Rubber Company are now getting about a third of the light weight truck upholstery material—that is the 26 ounce upholstery material—which is about the same as we were getting. Chevrolet Commercial [fol. 6361] usually has three sources of supply for that material, and currently the United States Rubber Company, Goodall Sanford Company and ourselves each have a third of the business.

The Court: The Court will now recess for fifteen minutes.

(Recess taken.)

The Court: Proceed.

By Mr. Neitzert:

Q. Mr. Nickowitz, you were naming some of the du Pont Company's customers whose business was lost to the United States Rubber in the automobile field, and you mentioned the Chevrolet Commercial Division.

Will you finish with the business lost to General Motors before you go on to the other companies?

A. Following Chevrolet Commercial, General Motors Truck adopted U. S. Rubber Company's material. I might say that it is customary for them to buy their upholstery materials on the light-weight trucks from the same source that Chevrolet Commercial buys from.

They use the same weight construction and pattern.

United States Rubber Company are getting theirs, we believe, approximately the same amount of business as we are getting, which is about one-third of their light truck upholstery.

In 1946 United States Rubber Company succeeded in getting the heavy duty upholstery business from General Motors Truck. Prior to that time GMC had been using leather upholstery material, and there was a shortage of leather, and of course there was also a shortage of fabrics

and plastics and plasticizer, but United States Rubber had [fols. 6362-6364] been concentrating in an effort to get additional business from General Motors Truck and apparently had enough raw materials with which to take care of that business, and they have had that particular construction from General Motors Truck 100 per cent ever since.

We have tried to get it, to break in there, and we just haven't been successful. They remind us of the fact that United States Rubber took care of them on that material during a period of shortage.

Q. Has United States Rubber gotten in with Fisher?

A. Yes, they supply, and have for the last four or five years, materials to Fisher for station wagons.

The Pontiac and Chevrolet, I believe it is, and then, more recently, they have gotten into Fisher Body in a very substantial way because of the growth of the popularity of the hard top convertible automobile, and Fisher's consumption has increased, and the United States Rubber Company are getting a very substantial portion of that business.

The United States Rubber Company's business in the automotive industry has increased very substantially, and at Fisher and Ford both, also where we have had business [fol. 6365]. I have one additional exhibit on a subject in which the Government has shown some interest in its subpoenaing, which I offer as Exhibit DP-507.

(Said document, so offered and received in evidence, was marked du Pont Exhibit No. 507.)

Mr. Neitzert: Exhibit DP-507 is a letter from the files of United States Rubber Company and is the next exhibit in your book.

This letter bears the stamp of January 6th P. M., 1947, and it refers to the occasion when the United States Rubber Company got the heavy duty truck upholstery business, at the General Motors Truck and Coach Division of the General Motors Corporation.

The first, second and third paragraphs are as follows:

"This is a very important initial order recently received from General Motors Corporation, Truck and Coach Division, and is a special construction Naugahyde which this fine customer is planning to use in the future as a replacement for genuine leather on their top quality lines of trucks and busses.

"The original trial order consists of a total of 5,000 yards and if this material is as satisfactory as the original samples we submitted, there will be substantial repeat business on this item.

[fols. 6366-6379] "Needless to say, a construction of this kind is rather expensive and represents a substantial investment for our customer with the result that they are going to be critical about the quality and appearance."

Q. Is that the expensive and heavy weight coated fabric that you had been attempting to sell to General Motors trucks without success since the date of this exhibit?

A. That is right.

-Adjournment.

[fol. 6380] The Court: Proceed, please.

MAX N. NICKOWITZ, called as a witness on behalf of the defendants, having been first duly sworn, resumed the stand and testified further as follows:

Direct examination (continued).

By Mr. Neitzert:

Q. Your Exhibit DP-497, and also your testimony, shows that neither du Pont nor U. S. Rubber went into the business of manufacturing and selling diaphragms, gaskets, washers, packings, shock and insulating packs until after 1933.

When did du Pont first enter into that business?

A. In 1936.

Q. When did United States Rubber enter this field?

A. U. S. Rubber entered that field about three to four years later.

Q. About what is your annual sales of that type of "Fairprene" product at the present time?

A. They are currently going at approximately \$3,000,000.00 annually.

Mr. Neitzert: Have you the 1952 competitive reports?

Mr. Harsha: Yes.

By Mr. Neitzert:

Q. What happened when the United States Rubber Company entered this field?

A. Shortly after they entered the field, we noted a concentrated drive on three of our very important customers who were leaders in their respective fields.

[fols. 6381-6520] One was Chefford Master Company of Fairfield, Illinois; the other was Bastian-Blessing; and the third was Fisher Governor.

Q. Were you supplying those companies with all of their requirements at that time?

A. We were supplying all three of those companies with all of their requirements of the type of materials we manufactured.

Q. What success did U. S. Rubber have with their solicitations of this business?

A. They were not successful at Chefford Master in getting any of the business.

In the case of Bastian-Blessing and Fisher Governor, they did succeed in getting some of the business and actually shared the business with us.

Mr. Neitzert: I offer in evidence, if your Honor please, Exhibit DP-497, an excerpt from the trade report dated September 27, 1946, relating to the efforts of the U. S. Rubber Company to obtain business from the Chefford Master Manufacturing Company.

(Said document, so offered and received in evidence, was marked du Pont Exhibit No. 497.)

[fol. 6521] OFFERS IN EVIDENCE (DU PONT).

Mr. Cox: If it please the Court, your Honor has been given a book which contains the exhibits which we should like to offer at this time. The exhibits will be offered in the order in which they appear in the book.

I should like first to direct the Court's attention to the first three of these exhibits which is intended to be treated as a group. They are the exhibits which have been marked for identification as du Pont Exhibit No. 442, No. 443, and No. 444.

Each of them is a technical exhibit, a table or a chart, or, in the case of the first one, it is a graph.

I am offering these exhibits as a group because they are

offered to meet the issues that were tendered by three [fol. 6522] statistical exhibits offered by the Government. Those Government statistical exhibits, your Honor, are found in Volume 6 of the printed Government's Exhibits and are numbered 1204, 1205 and 1295. They appear in Volume 6.

(Said documents, so offered and received in evidence, were marked as Defendants' Trial Exhibits Nos. DP-442, DP-443, and DP-444.)

Mr. Cox: With those exhibits before me, I should like first to comment on an exhibit which has been marked du Pont Exhibit No. 442 for identification, which I offer at this time.

Mr. Harsha: Is it agreeable to state for the record at this point that I believe we have the understanding that we may reserve objections on the documents which are being put in now without a witness, in the event we wish to have someone examined later on?

Mr. Cox: That is agreeable to me, if you will state that on the record.

I think perhaps I might amplify that statement, your Honor, by saying that I understand the arrangement is that the Government will notify us hereafter whether it wishes to have a witness produced who will testify with respect to these exhibits, that witness to testify as part of the Government's rebuttal case. But at that time it is also agreed that if it seems desirable, we shall have the opportunity to examine the witness first in a preliminary way to lay his qualifications on the record, and to explain the way in which the chart has been prepared, and that then the witness may be cross-examined by the Government.

Is that it?

[fol. 6523] Mr. Harsha: Yes, I think there is one additional factor.

We reserve the right to call for some of the foundation materials that have been used.

Mr. Cox: We have offered to make available to the Government any underlying material which has been used to make up these charts.

Mr. Harsha: Is that agreeable to the Court, your Honor.

The Court: It is agreeable with the Court.

Mr. Harsha: Thank you.

Mr. Cox: If I may return now to our Exhibit 442, the Court will recall that when the Government Exhibits 1204 and 1205 were offered by the Government—those are exhibits, by the way, headed, “Relative size of du Pont, General Motors and U. S. Rubber in their respective fields”—and I am now directing my remarks only to that part of the Government exhibit that relates to du Pont.

The Court will recall that when those exhibits were offered, I pointed out that it seemed to me that those exhibits created a somewhat inaccurate impression of the size and importance of du Pont in the various industrial fields in which it is engaged.

I based this comment on the fact that the net sales of du Pont, which were shown in the Government exhibit, reflected sales of such commodities as paints, synthetics, and fabrics of various kinds, which were not manufactured and sold by the other companies shown in the Government chart, whose net sales were being compared with those of du Pont.

Our Exhibit 442 is designed to show the other side of [fol. 6524] that picture, that is, it shows that if the du Pont sales are compared with the sales of all other companies that make comparable or competitive goods, in other words, if you look at the entire market, du Pont's position in the market is relatively small.

Our Exhibit No. 442 thus shows value of du Pont's shipments in 1947 was only 8½ per cent of the total value of all the shipments made by all the other companies in the United States with which du Pont competes.

This exhibit, I may say, is based on figures that have been collected and certified by the United States Bureau of Census, and we are prepared to supply that certification to the Government if it requires it.

The du Pont shipments are taken from the reports that are made by the du Pont Company to the Census. The shipments of the other companies are taken from the reports filed by those companies with the Census. The classification of the industries and the determination of the industries in which the du Pont Company participates and in which the other companies participate, those determinations are all made by the Census as reflected in its certification.

So much for our Exhibit 442.

The next exhibit, which is 443, also bears on the general charge made by the Government that the growth of the du Pont Company has in some way been unnaturally and unlawfully fostered by the alleged arrangements that are said to have existed between du Pont and General Motors and between du Pont and U. S. Rubber.

This chart, that is to say, 443, shows the growth in net sales in 1939 and 1948 of du Pont and 27 other chemical companies.

[fol. 6525] So that the comparison can be made on the basis of sizable companies, it has been restricted to companies which in 1948 had sales of more than \$20,000,000.00, that is to say, net sales because this chart relates to net sales.

The Court will note that at the end of each bar on this chart, at the righthand side, there is a percentage figure. Now those percentages are computed in this way: The net sales of each company as shown by Moody's Industrial for the year 1948 were compared with its net sales for 1939.

In each case, as might be expected, the net sales in 1948 were greater than the net sales in 1939.

The percentage figures at the right hand side of each bar show the relationship between the amount of this increase and the total net sales of each company in 1939.

If I may take a specific example, in the case of the Dow Chemical Company, which is a well known chemical company, and which is shown in the second bar from the top, the amount by which Dow's net sales in 1948 exceeded its net sales in 1939 was 537 per cent of the net sales in 1939.

Now, it will be noted in this chart that the rate of increase in du Pont's sales was exceeded by the rate of increase of fifteen other chemical companies.

It is also to be noted, I think, that gauged in terms of the percentage increase in sales, du Pont appears slightly more than half way down the list of companies. This suggests that its rate of increase in sales has not been in any way extraordinary or unusual.

The table also establishes, we believe, that the size of the du Pont Company as shown by the Government's Exhibits has not impeded the growth of other major chemical concerns.

[fols. 6526-6531] So much for du Pont Exhibit No. 443, which I offer in evidence at this time.

Mr. Cox: The next chart, the third one, is du Pont Exhibit No. 444, and that is a comparatively simple chart which has to do simply with the subject of paints.

This again is based on figures compiled by the Bureau of Census. This chart compares du Pont shipments with paints and varnishes, and that includes lacquers, with those of the total industry.

The left hand side of the chart compares du Pont shipments with those of the total industry in dollar amounts in 1939 and 1947.

On the right hand side of the chart, du Pont's participation in the total shipments of the industry is shown in a percentage relationship.

It will be noted that in both years 1939 and 1947, du Pont's share of the total paint and varnish industry was relatively small, being 9.5 per cent in 1939, and 8.1 per cent in 1947, and that between 1939 and 1947 its position in the industry actually decreased slightly, that is to say, from 9.5 to 8.1 per cent.

So much for our Exhibit DP No. 444, which I now offer in evidence.

Mr. Cox: The next exhibit is 446, which I now offer in evidence.

(Said document so offered and received in evidence, was marked Defendants' Trial Exhibit No. DP-446.)

[fol. 6532] Mr. Cox: When we rose for lunch I had finished my comments on our Exhibit No. 450 which is an exhibit relating to du Pont sales to United States Rubber, and I turn now to a similar exhibit which is the next exhibit in the book, du Pont Exhibit No. 445, which I now offer.

(Said document, so offered and received in evidence, was marked du Pont Exhibit No. 445.)

Mr. Cox: Du Pont Exhibit No. 445 is a similar chart, similar to the preceding chart, except that it covers sales by du Pont to General Motors of the same seven-year period.

This table is prepared in the same form as the United States Rubber table with one exception: In the case of the

preceding table which related to United States Rubber, a single figure was shown for the Fabrics and Finishes Department as a whole, and in the case of General Motors, because of the importance of the volume of the testimony [fol. 6533] that has related or was related separately to fabrics and finishes, we have broken down the sales figures in the case of the Fabrics and Finishes Division to show the sales of fabrics separately from the sales of finishes.

As in the case of the table showing sales to United States Rubber, the totals for each of the defendants and for all of the defendants, I should say, are shown at the foot of the table, a total for each year relating to sales of all departments.

It will be noted from looking at those totals that most of the sales to General Motors were between three and three and a half per cent of du Pont's total sales, and that at no time during this period were the sales to General Motors more than 4.1 per cent of du Pont's total sales.

This table, like the Rubber table, is based upon materials supplied the government during the course of the grand jury investigation, and which is now in the government's possession, with the exception of the figures for the last five months of 1948 which were collected for use at this trial.

I think that with those comments I shall leave that exhibit and go to the last of these statistical exhibits that I comment on at the present time.

This next and last exhibit I shall comment on is du Pont No. 451, which I offer at the present time.

That is the next exhibit in the book.

This exhibit, may it please the Court, is the one marked 451, and has particular relevance to the charge made in Paragraph 30(b)2 of the amended complaint.

(Said document so offered and received in evidence was marked du Pont Exhibit No. 451.)

[fol. 6534] Mr. Cox: That paragraph charges that as a part or as the result of a conspiracy, du Pont expanded its facilities so as to enable it to produce the types and quantities of products that were used in substantial quantities by General Motors and by United States Rubber.

Now, this table, 451, is confined to products which were new to the du Pont Company after 1928, or since 1928, or, as the chart table defines the products, it is confined to products the du Pont Company added to its line after 1928, or which were produced and sold commercially in quantities for the first time after 1928.

The total sales of those new commodities in typical year, that is 1950, is shown, and that figure is \$852,465,000. Those are the total sales made to all purchasers by the du Pont Company in 1950, of these new products.

The next two figures show the total sales of the new products made in 1950 to General Motors and to United States Rubber. The sales to General Motors were \$13,057,000, or 1.5 per cent of the total sales of new products, and the sales of the United States Rubber being \$15,607,000, or 1.8 per cent of the total sales of the products.

This year, 1928, was selected as the breaking point of the products because the company, for other purposes unconnected with this lawsuit, had made a study of its products that were new to its sales efforts after 1928. We assume that that is a fair year, so far as the Government's purposes go, because we assume that it is the Government's position that by 1928 the conspiracy was in full flower.

Now, may it please the Court, that completes the comments I wish to make on the physical exhibits. We have [fol. 6535] additional documentary evidence which has been classified according to the subject matter, which we should like to offer at this time.

We have divided that among ourselves more or less in accordance with the division that was made for the presentation of the evidence. So at this point Mr. Gribbon will take over the presentation of evidence and present some documents relating to certain other specific commodities.

Mr. Gribbon: May it please the Court, as Mr. Cox has said, we have divided the balance of exhibits we propose to introduce this afternoon in accordance with the issues or incidents in the case that they pertain to.

I might say at the outset that we have no intention of reading all of these documents. Our intention, rather, is to relate these documents to the incidents and to confine ourselves in reading or describing them only to so much of the

document as is necessary to point out their particular relevance in the case.

The first group of documents are found in the tab in your Honor's book under Flint Varnish.

There are seven documents in this book that have been numbered for identification with the numbers DP-217, 218, 460, 219, 220, 216, and 221.

All of these exhibits, if the Court pleases, relate to the Flint Varnish and Color Works. That company, the Complaint alleges, was acquired by the du Pont Company in reliance upon an understanding that du Pont would be the primary supplier of General Motors for paints, varnishes, and lacquers.

The Government has introduced in evidence an exhibit which has been identified as Government Exhibit 277, a [fol. 6536] report by the du Pont Development Department in April, 1918, relating to the acquisition of the Flint Company.

At page 2 of that exhibit, there is reference to a report of the development department, which was in process, in fact, was completed but not typed, and Government Exhibit 277 states that that report will recommend that du Pont's paint and varnish development, which had been in progress since 1916, be along industrial lines.

I now offer in evidence Exhibit DP-217, which is the first seven pages of the Development Department report referred to in Government's Exhibit No. 277, which was under preparation at the time that the Flint Company was acquired.

(Said document, so offered and received in evidence, was marked du Pont Exhibit No. 217.)

Mr. Gribbon: I do not propose to read this exhibit, but simply to point out that in this exhaustive study of how du Pont should proceed in the paint and varnish industry, there is no mention that General Motors would be a profitable outlet for paint and varnish, nor is there mention that the automotive industry, generally speaking, would be such an outlet.

I next offer Exhibit DP-218 and Exhibit No. DP-460.

These two exhibits relate to the circumstances of du Pont's acquisition of the Flint Varnish & Color Works in

the spring of 1918, and more particularly to the allocation of the minority interest in the Flint Company.

(Said documents, so offered and received in evidence, were marked du Pont Exhibits No. 218 and 460.)

[fol. 6537] Mr. Gribbon: Exhibit No. 460 states the role that the du Pont people expected Mr. Mountain, the president of the Flint Company before du Pont acquired the majority interest in it, would be expected to play in the future operations of the Flint Company.

Reading the second paragraph of du Pont Exhibit No. 460, it states:

"It is understood that Mr. W. W. Mountain will be retained as President of the Flint Varnish & Color Works at the same salary which he is getting at the present time; that he will be in full charge of this Company the same as he is today. There is no question but what Mr. Mountain is a very valuable man, and that through his very close connection with Mr. Willys, Mr. Durant, and several other of the large automobile people, he holds a very large amount of business. He is also a very prominent man in the vicinity of Flint, Michigan, being president of the Chamber of Commerce of that city, and also prominent in other affairs."

Exhibit No. 218 encloses a letter by Mr. R. R. M. Carpenter which ascribes to Mr. Mountain, the same Mr. Mountain described in Exhibit No. 460, the division of the minority stock in Flint to Mr. McLaughlin, Mr. Willys, Mr. Mountain and Mr. Durant for the account of General Motors.

The record shows, if the Court pleases, that Mr. Lamont du Pont became chairman of the Board of the Flint Company and actively solicited business for Flint from at least some of the General Motors units.

Government's Exhibits Nos. 442 and 444 through 449 consist of correspondence between Mr. du Pont and Mr. [fol. 6538] Rice and others in the management of the Cadillac Division.

We offer in evidence Exhibit DP 219, which is the next exhibit in your Honor's book, which fits chronologically into the exhibits that the Government has offered, between Government's Exhibits 446 and 447.

(Said document so offered and received in evidence was marked Defendant du Pont Exhibit No. 219.)

Mr. Gribbon: Your Honor will see on the first page just below the quotation, the statement that: "Mr. Sohlinger—" who was a du Pont salesman—says they do not give—"they" mean Cadillac.

(Reading):

"—the Flint Company a chance to compete for their enamel business."

We next offer in evidence Exhibit DP 220. This is a memorandum by Mr. Lamot du Pont to Mr. Grubb, who was the general manager of the du Pont paint operations.

(Said document so offered and received in evidence was marked Defendant du Pont's Exhibit No. 220.)

Mr. Gribbon: The letter undertakes to list the various divisions of General Motors and to set forth those that are not buying finishing varnish from Flint.

Your Honor may recall that when Mr. Lawrence Fisher testified, he explained that finishing varnish was the last [fol. 6539] coat applied in the old varnishing system before it was supplanted by "Duco." That was at page 1010 of the transcript.

This letter, it will be noted, was written in May of 1923, which would be five years after the Complaint alleges there was an agreement that General Motors was to buy all or substantially all of its requirements of paints and varnish from du Pont.

I should like to read the second paragraph of this report, written by Lamot du Pont:

"I note that Buick Motor Company, Flint; Oakland Motor Company, Pontiac; Olds Motor Works, Lansing and Cadillac Company, Detroit, do not use our finishing varnish, and apparently the other divisions have no use for a finishing varnish.

"It thus appears that we are not selling any finishing varnish to any GMC unit. There must be a reason for this. Is it because our finishing varnish is not up to the standards of our competitors? I think this should be looked into carefully."

This Exhibit 220 might be compared with an exhibit Government's Exhibit No. 420, which is another and somewhat more elaborate report on the status of du Pont's sales to General Motors written in 1921.

A comparison of that report will show that in the intervening two years, du Pont had lost business at some of the General Motors' units:

The record, particularly Exhibits 434, Government's Exhibit No. 434, and Exhibits Nos. 437 through 441, show efforts by Lamont du Pont, Chairman of the Board of [fol. 6540] Flint, to interest the Fisher Body Company in the use of Flint products.

In this connection, we offer DP Exhibit No. 216, which is a schedule of the Flint Varnish & Color Works' sales to the Fisher Body Company in 1923 and 1924, as well as sales to the Buick Company.

This table, we suggest, establishes that the Flint Company, in both of those years, sold only trifling amounts of finishes to Fisher Body.

(Said document so offered and received in evidence was marked as du Pont Exhibit No. 216.)

Mr. Gribbon: By comparing the Fisher purchases with those of Buick, and also comparing the production of the two divisions, it is apparent that the Fisher Company could have been buying but a very small percentage of its requirements of finishing products from Flint.

Finally, in connection with Flint, we offer Exhibit DP-221.

(Said document so offered and received in evidence was marked du Pont Exhibit No. 221.)

Mr. Gribbon: In its opening statement, the Government asserted that the Flint operation was highly profitable to the du Pont Company because, following du Pont's acquisition of the Flint Company, du Pont enjoyed a market in General Motors that was protected against any competition.

Those references will be found at the transcript pages 56 and 57.

[fol. 6541] Now, quite apart from the question of whether there was any protected market, which we met with other evidence, we offer DP Exhibit No. 221 to show exactly what

the profit situation of the Flint Company was in the period 1916 through 1924 when it was dissolved.

It will be seen that in the years following du Pont's acquisition of a majority interest in Flint, which was 1918, the Flint Works earned less money than they had in any of the three previous years, and actually lost money in two of those years; and that further it wasn't until 1923 when General Motors and the entire automotive industry had greatly expanded that Flint was able to earn as much money as it had in 1916, two years before du Pont had any interest in Flint.

If the Court please, we now turn to the next section in the volume that has been given to you. We wish to introduce at this time three exhibits relating to du Pont's efforts to sell maintenance paint to the Hyatt Division of General Motors.

I offer in evidence Exhibits DP 225, 226, and 227. These exhibits merely fill out the correspondence which the Government has introduced at Nos. 311 through 314.

(Said documents so offered and received in evidence, were marked Defendant du Pont Exhibits Nos. 225, 226 and 227.)

Mr. Gribbon: The next group of documents, if the Court please, relate to the subject of Pyralin.

Pyralin was du Pont's trade name for transparent celluloid. In paragraph 39 of the Complaint it is alleged that a [fol. 65-2] purpose of the General Motors investment in 1917 and 1918, at least, in part, was to secure a protected market for the pyralin business which du Pont had entered into in 1915.

I believe the record also shows that this product Pyralin was used rather extensively in the '20's on the windows of open cars, detachable windows of open cars.

I offer in evidence Exhibits DP 421 and 462. Those are tables, the first two that appear in your Honor's book.

(Said documents so offered and received in evidence were marked Defendant du Pont Exhibits 421 and 462.)

Mr. Gribbon: We have been unable to develop full records for this early period. We have put together what has been available.

We believe that Exhibit 421 shows that whatever sales of pyralin du Pont was making to the General Motors units were relatively small compared to its total sales of pyralin to all customers.

This shows total sales and sales to the Buick division and the Chevrolet division of General Motors for the period 1916 through 1932.

Exhibit DP 462 shows that those two divisions, Buick and Chevrolet, from 1918 through 1930, accounted for upwards of 75 per cent of General Motors production of open cars, and it was the open cars only that used the pyralin at that time.

So that it is our belief that the sales to these two divisions represent a very large percentage of total sales to General Motors.

It will be seen that in no year throughout that period did sales of pyralin to these two divisions approach a half million dollars, and that following 1925 there was no year in which sales were in excess of \$200,000 going down to 1932 when sales trickled off to about \$7500.00.

I introduce next Exhibits DP-423, 424, 425, 426, 427 and 428, which follow along in your Honor's book:

(Said documents so offered and received in evidence were marked du Pont Exhibits Nos. 423 through 428, both inclusive.)

Mr. Gribbon: These exhibits are excerpts from reports of the Arlington Company, which was the subsidiary through which du Pont operated its pyralin business.

They show that from 1915, when du Pont acquired Arlington, through 1917, when the General Motors investment took place, that rather than requiring a protected market, the Arlington Company was prospering.

Each of these reports shows that orders are running ahead of capacity.

Typical of the reports is Exhibit No. 426, where, on the second page, there is a paragraph relating to sales of pyralin to the automobile trade.

This is in August of 1916. The statement is made:

"Our relations with the trade in this line are on a highly satisfactory basis, the Willys-Overland Com-

pany being the only large user with whom we have not established a satisfactory connection."

Exhibit No. DP-428, which was written in June of 1917, a few months before the du Pont Company's investment in General Motors, is in the same vein, to the effect that [fol. 6544] the automobile trade is indicating well in advance its requirements and they show heavy demand.

Trade conditions remain about the same with demands for our material beyond our ability to supply.

Next, your Honor, I introduce DP Exhibit No. 429. I suggest this is a particularly significant document in view of the charges in Paragraph 56 of the complaint.

(Said document, so offered and received in evidence, was marked du Pont Exhibit No. 429.)

Mr. Gribbon: Paragraph 56 of the complaint charges that beginning in 1917 with the General Motors investment, it was agreed that General Motors would buy from du Pont all, or substantially all, of the products manufactured by du Pont.

This Exhibit No. DP 429 is a report dated January 22, 1918, and is therefore contemporaneous with the investment by the du Pont Company in General Motors which was authorized in December of 1917 and carried out in the first few months of 1918.

The report, Exhibit No. 429, was written by Lamont du Pont, a member of both the Finance and Executive Committees of the du Pont Company that approved the investment in General Motors.

The report relates to the question of whether the Arlington Company, which was making pyralin, which was at that time used in the automobile trade among other uses, whether the Arlington Company should expand its capacity.

As is stated on the first page of the report, second paragraph:

"The question whether we build an additional plant for transparent, or any other quality, depends primarily [fol. 6545] on the expectation of an increased demand a year or more hence, or after the war. We are now disposing of the entire output of the present plant."

Lamot du Pont, in recommending with respect to this question of whether there was any reason to foresee an increased demand for pyralin, concludes, as is shown on page 3 of the exhibit, in the next to last paragraph:

"As stated before, the question depends on the Sales Department's estimate of demand for Pyralin after the war. In the summer of 1916—"

Now that was better than a year before du Pont's investment in General Motors.

"In the summer of 1916, Mr. Burckel made a forecast of the demand for Pyralin for several years ahead. This forecast did not show any demand in excess of our present capacity for several years to come. I do not know of any reason justifying Mr. Burckel making a radical change in his forecast of 1916."

I now introduce on the subject of pyralin, Exhibits numbered DP-430, 431, 432, 433, 434 and 435.

I suggest that these exhibits be read in conjunction with Government's Exhibit No. 419.

(Said documents so offered and received in evidence were marked Defendant du Pont Exhibits Nos. 430, 431, 432, 433, 434 and 435.)

Mr. Gribbon: In Government Exhibit No. 419, there is a statement attributed to the sales manager of du Pont's [fol. 65-46] pyralin sales to the effect that according to du Pont's estimate at that time, August of 1921, it was selling the General Motors units their requirements of pyralin.

Now these exhibits, 430 through 435, cover a period from 1923 through 1926 when pyralin was being used in the automobile trade. They contain statements showing similarly that at various times du Pont was supplying the entire requirements of various automobile companies in addition to the General Motors units, including Nash, Studebaker, Reo, White, Maxwell and Chrysler.

In addition, Exhibit DP-435 shows substantial orders from the Ford Motor Company.

Finally, on the subject of pyralin, I offer in evidence Exhibit DP-422. This is a table showing du Pont sales of

pyralin to General Motors and to all customers in the period 1946 through 1950.

(Said document so offered and received in evidence was marked Defendant DP-Exhibit No. 422.)

Mr. Gribbon: Now, it is apparent that the use of pyralin for automobile windows in closed cars has long since passed. The only use of it in the automobile trade is for ornament, trim, things of that kind.

This table shows that sales of pyralin currently and in the past several years are most insignificant in terms of du Pont's sales or in terms of General Motors requirements.

This indicates that du Pont sold over \$5,000,000 worth of pyralin in 1950, of which a total of \$9,000 was sold to General Motors.

Turning, if the Court please, to the next subject, which I believe is labeled "Ammonia—New Departure"; Government Trial Exhibits 371 through 374 consist of a request that was made upon Mr. Pratt, vice president of General Motors, by a friend of his in du Pont's ammonia department, asking Mr. Pratt if he would inquire why du Pont had lost business with the New Departure division, one of the accessories divisions under Mr. Pratt's jurisdiction.

I would like to offer in evidence DP Exhibit No. 441. This is a table showing du Pont's sales of ammonia and all ammonia products to the New Departure Manufacturing Company in the period 1933 through 1938.

(Said document so offered and received in evidence was marked du Pont Exhibit No. 441.)

Mr. Gribbon: The Government's Exhibits to which I refer are dated in 1934, and it will be seen that in the year following the request—let me say first that this table shows the insignificance of the volume of sales that were being discussed at that time in this correspondence, but it also shows that in the year following Mr. Pratt's letter to the New Departure people, that is 1935, and in the succeeding years, du Pont actually sold less ammonia to New Departure than it had in the year before the request was made, 1933.

The next subject has to do with ethyl alcohol. Govern-

ment's Exhibits Nos. 315 through 318 disclose an inquiry by the du Pont Development Department to General Motors asking General Motors' requirements or usage of ethyl alcohol because du Pont was investigating the question of entering upon the manufacture of ethyl alcohol.

In Government's Exhibit No. 316, Mr. Pratt states that General Motors' requirements of ethyl alcohol are comparatively small, and Exhibit No. 318, Mr. Lynah states these requirements to be approximately 125,000 gallons per year.

I offer in evidence DP Exhibit No. 438, which is an excerpt of a letter from Mr. Brown of the du Pont Company to Mr. Kielberg of the United Molasses Company for the purpose of showing, as is shown in the third paragraph of this exhibit, the capacity of the plant that the du Pont Company erected following its study of possible requirements for ethyl alcohol.

(Said document, so offered and received in evidence, was marked du Pont Exhibit No. 438.)

Mr. Gribbon: The third paragraph indicates the plant as originally constructed had a capacity of approximately 8,000,000 gallons of marketable alcohol per year.

That exhibit we suggest offers a basis for concluding to what extent, if any, General Motors' possible requirements of 125,000 gallons per year might have had upon du Pont's decision to enter upon the manufacture of ethyl alcohol.

Further on the subject of ethyl alcohol, Government's Exhibits Nos. 328 and 329 reflect an effort by du Pont, once it entered into the manufacture of ethyl alcohol, to secure some of General Motors' business.

In Trial Exhibit, Government's Exhibit No. 329, Mr. Pratt referred the du Pont's sales proposal to the General Purchasing Committee.

Mr. Gribbon: I offer in evidence Exhibits DP 439, 436 and 437.

[fol. 6549] (Said documents so offered and received in evidence were marked du Pont's Exhibits Nos. 436, 437 and 439.)

Mr. Gribbon: DP Exhibit No. 439 shows that on September 30th, 1927, the General Motors Purchasing Committee rejected a proposal by the du Pont Company for a contract

covering General Motors' requirements of denatured alcohol, and it might be noted that not only du Pont was bidding for this business, but two other companies, Michigan Alkali and United States Industrial Alcohol Company.

Exhibits DP 436 and 437 follow along in time, 439, and indicate that du Pont came back and suggested that there were price attractions to General Motors in buying ethyl alcohol from du Pont, which is Exhibit No. 436, and 437 indicates the final rejection by the General Purchasing Committee of du Pont's request for a contract to supply ethyl alcohol.

The next group of documents, if the Court pleases, relate to the subject generally of du Pont's sale of finishes to General Motors following the discovery, adaption and introduction of "Duco."

I offer in evidence DP 461 which reflects judgment by the Dunham Body Company in late 1922 of the value of "Duco" as an automobile finish.

(Said document so offered and received in evidence was marked Defendant DP Exhibit No. 461.)

[fol. 6550] Mr. Gribbon: I offer in evidence Exhibit DP 224, which has to do with a contract between General Motors and the United States Industrial Alcohol Company.

(Said document so offered and received in evidence was marked Defendant DP Exhibit No. 224.)

Mr. Gribbon: Government's Exhibit No. 469 states that a contract was made by General Motors with United States Industrial because that company had quoted a lower price on thinner than du Pont was prepared to give, and an exhibit, GM-155 shows that this contract with the United States Industrial was not renewed in June of '47, after it had run for only six months.

Now, during the cross examination of Mr. Lynah, Government's counsel alluded, at page 2762 of the transcript, to the failure of General Motors to renew this contract, and commented, "Well, they had served their purpose, hadn't they?"

We offer Exhibit DP 224 to show the reasons why the general purchasing committee rejected the United States Industrial Alcohol's offer to renew the contract.

The first two paragraphs of that exhibit, 224, show that

du Pont quoted a lower price than did U. S. Industrial Alcohol, and for that reason was awarded the contract.

I offer in evidence Exhibit No. 223, DP 223, the next exhibit in your Honor's book, which is an answer to a letter that has already been introduced in evidence by the Government as Government's Exhibit No. 495.

(Said document so offered and received in evidence was marked du Pont Exhibit No. 223.)

[fol. 6551] Mr. Gribbon: This letter has to do with the super-discount, and in it one Charles Blake, writing to the du Pont Company with respect to super discount, states in the second paragraph:

"We note that you prepared the volume of purchases within a few days after the termination of the contract and we are wondering if you are in a position to let us have the information at the end of each month. We have several contracts of this character and at the end of every month we make a quantify discount performance schedule which is sent to all divisions."

The next group of documents, if the Court please, have to do with the subject of brake fluid, Exhibits DP 383 through 392, and 395 through 397, along with the testimony of witnesses Weber and Walker, reflect in some detail the continuing efforts by the du Pont Company from 1934 to the war, to interest the General Motors divisions, car divisions, the research people and the Delco Division in the use of du Pont's brake fluid.

Three documents which have been identified as Exhibits DP 393, 394 and 398 are reports by Mr. Walker and were inadvertently omitted in the presentation of the brake fluid portion of the case.

I now offer them in evidence.

(Said documents so offered and received in evidence were marked du Pont Exhibits Nos. 393, 394, and 398.)

[fols. 6552-6558] Mr. Gribbon: And to supplement the evidence on brake fluid, I offer in evidence Exhibits DP 399 and 447.

(Said documents so offered and received in evidence were marked du Pont Exhibits Nos. 399 and 447.)

Mr. Gribbon: These exhibits reflect the volume of brake fluid that the Delco Division of General Motors compounded and distributed to the Car Divisions, the using divisions of General Motors during the period 1936 through 1951. Your Honor will recall that the evidence shows that in lieu of buying brake fluid from du Pont, the General Motors' divisions preferred to have the Delco Division compound its own brake fluids.

We offer Exhibit DP-399 to show the order of magnitude of the market for brake fluid in General Motors, du Pont was shooting at in the sales efforts that were related by the Witnesses Walker and Weber.

And we offer Exhibit No. DP-447 as indicating the degree of success that du Pont had in selling the very same brake fluid that General Motors rejected, to customers other than General Motors.

It will be seen that in 1950 du Pont was selling brake fluid at an annual rate of in excess of \$3,000,000, all of it to customers other than General Motors.

Exhibit DP No. 399 shows that General Motors' usage of brake fluid in 1950 and 1951 was in the neighborhood of two or three million dollars.

[fol. 6559] Mr. Horsky: I have a very brief number of documents, and the first two relate to a matter of safety glass, du Pont's brief and unsuccessful effort to sell safety glass to General Motors through the Duplate Corporation.

The first one which I offer as du Pont 449 should be read with du Pont's Exhibits 160 through 171, and it adds one further fact, namely, that in 1931 General Motors, which theretofore had manufactured some proportion of its own requirements of safety glass, abandoned its safety glass and turned to outside sources of supply.

(Said document so offered and received in evidence was marked du Pont Exhibit No. 449.)

In connection with that same matter, I should like to offer du Pont 463, which is a schedule of the five years for 1927 to 1931 during which du Pont was offering safety glass through Duplate, and during which also General Motors was manufacturing some proportion of its own requirements.

(Said document so offered and received in evidence was

[fol. 6560] Mr. Horsky: This is the sales by du Pont through the Viscoloid Company of the plastic filler which was necessary in the manufacture of safety glass, to the Fisher Body Division of General Motors, and it shows that sales of that material by du Pont to General Motors were inconsequential.

The last two exhibits relate to tetraethyl lead.

I should like to offer du Pont Exhibit No. 448 as a further explanation, and in further support of a letter which has been introduced by the Government as Government's Trial Exhibit No. 711 from Irene du Pont.

(Said document so offered and received in evidence was marked du Pont Exhibit No. 448.)

Mr. Horsky: Without going into the details, this is a petition and power of attorney and the specifications of a patent application prepared by the representatives of the American Research Laboratories, which your Honor may recall was the outfit in Denver which Mr. Webb considered briefly in 1926 as a possible second source of supply for tetraethyl lead for the Ethyl Corporation.

It is significant in this case that the patent application reveals by the specifications, and particularly in the last paragraph on page 3, which I need not read, that Mr. du Pont was correct in Government's Trial Exhibit No. 711, in pointing out that this method by which these people proposed to produce tetraethyl lead involved the use of bromine, and therefore did not avoid the bromine shortage problem which was inherent in the earlier problems of production of tetraethyl lead by the du Pont Company.

The last exhibit that I have is a corrected version of [fol. 6561] Defendant's Trial Exhibit No. DP-119. The numbers are unchanged.

We discovered, after the exhibit was introduced, that the earlier exhibit had purported to state these figures as du Pont production of tetraethyl lead. It should have been "du Pont sales of tetraethyl lead," and this exhibit has a corrected caption.

I regret to say, however, that in correcting that aspect of the exhibit, we still omitted to correct one other aspect of the exhibit which I pointed out at the time the original one was put in, namely, that the figures in the middle column are not a poundage figure, but are thousands of pounds.

The caption should have in parentheses "In thousands of pounds."

Other than that, this is the same as the prior exhibit.

Mr. Scott has the balance of the exhibits, your Honor.

Mr. Scott: The few remaining documents relate to certain episodes to which there is already evidence in the record, and tend to amplify the circumstances surrounding those episodes.

The first document, No. DP 452, is a chart which we have prepared primarily for the convenience of the Court in appreciating the rather complicated evidence which now is in the record, as to the permanent financing of du Pont's emergency purchases of General Motors' stock in the latter part of 1920.

Your Honor will recall that there is evidence in the record as to the emergency conditions in the latter half of [fol. 6562] 1920 which led first to Mr. Durant's personal difficulties, and also to the failure of the English investors to take up some \$15,000,000.00 of commitments under the new common stock issue.

In connection with both of those episodes the du Pont Company entered into very substantial commitments which were financed on a temporary basis at that time, in the spring of 1921, and these temporary commitments proved to be a blot on the credit of General Motors, and were ultimately taken up through the application of proceeds of the \$35,000,000.00 bond issue, put out by the du Pont Company itself.

This chart shows on the lefthand side the total outstanding commitments which required permanent financing, and on the righthand side you will note the application of the proceeds of the du Pont \$35,000,000.00 bond issue.

(Said document, so offered and received in evidence, was marked du Pont Exhibit No. 452.)

Mr. Scott: I now offer in evidence DP 453. DP 453 is a memorandum over the signature of Pierre S. du Pont, president of General Motors, and on the second page you will note under the printer's note, the memorandum was dated February 16, 1923. This memorandum was prepared in the early part of 1923, in connection with the distribution of bonus benefits under the General Motors Bonus Plan.

Your Honor will recall that the record shows that the General Motors Bonus Plan was originally adopted in [fol. 6563] 1918, in that year, and that for the year 1921 no bonuses were earned; that during the year 1922 there was a change in the form of administration, and this represents the first distribution after Mr. Pierre du Pont became president.

I offer in evidence DP 453.

(Said document, so offered and received in evidence, was marked du Pont Exhibit No. 453.)

Mr. Scott: DP 454 is a letter signed by Irene du Pont, president of du Pont Company, addressed to the Finance Committee of the du Pont Company, and is introduced to supplement the series of documents which are now in evidence relating to the discussions within the du Pont Company of the adoption of the proposed Managers Securities Plan.

I offer in evidence DP 454.

(Said document, so offered and received in evidence, was marked du Pont Exhibit No. 454.)

Mr. Scott: DP 455 is a letter to the stockholders of General Motors signed by Alfred P. Sloan, Jr., president of General Motors, and is the letter which submitted to the stockholders of General Motors the Managers Securities Plan.

Annexed as a part of that exhibit is the plan itself, which is in the form in which it was submitted, and finally adopted.

I offer DP 455 in evidence.

(Said document, so offered and received in evidence, was marked du Pont Exhibit No. 455.)

[fol. 6564] Mr. Scott: DP 458 is an excerpt from the minutes of meeting of the Finance Committee of the du Pont Company, dated November 4, 1929. It relates to the consideration of the problem of finding ways and means to convert the Managers Securities stock into the common stock of General Motors Corporation.

There is now in evidence in the record that in the year 1930 there was a plan developed for partial distribution.

I offer DP 458 in evidence.

(Said document, so offered and received in evidence, was marked du Pont Exhibit No. 458.)

Mr. Scott: DP 456 is an excerpt from the meeting of the Board of Directors of the du Pont Company held on March 21, 1932.

This document, and also DP 457, relates to the episode, which is now a matter of record, that in the depression year of 1931 the du Pont Company purchased 300,000 shares of stock from Fisher Brothers.

These two documents are intended to supplement the documentary record relating to that episode.

The first document, if your Honor will note, indicates that this was intended from the outset to represent a temporary investment, and the second document, which is an excerpt from the meeting of the Finance Committee held on May 15, 1933, your Honor, you will note, carries out the same theme, and indicates that except for a very small portion of the 300,000 shares which was transferred to the permanent investment account, it was treated as a simple investment, and the record shows, independent of [fols. 6565-6567] those documents, that ultimately a portion was sold, and the balance was distributed to the stockholders as a dividend.

I offer those two documents, namely, Exhibit Nos. DP 456 and 457 in evidence.

(Said documents, so offered and received in evidence, was marked du Pont Exhibits Nos. 456 and 457.)

Mr. Scott: The last and final document, DP 459, relates to the final episode in connection with Managers Securities, which was the discussion of General Motors Securities Company.

It now appears from the record that this company was dissolved in 1938.

This document is a memorandum prepared in March of 1937 in the Treasurers Department of the du Pont Company, and sets forth the tax reasons, first, for originally holding the General Motors stock via a wholly owned corporation, and finally, the tax reasons for dissolving it at that time.

I offer in evidence DP 459.

(Said document so offered and received in evidence was marked du Pont Exhibit No. 459.)

[fol. 6568] WALTER S. CARPENTER, JR., called as a witness for the Defendants, having been first duly sworn, was examined and testified as follows:

Direct examination.

By Mr. Cox:

Q. You are Walter S. Carpenter, Jr.?

A. I am.

Q. And you live in Wilmington, Delaware?

A. I do.

Q. And you are now Chairman of the Board of Directors of the du Pont Company?

A. That is correct.

[fol. 6569] Q. How long have you been Chairman of the Board of Directors of the du Pont Company?

A. Since 1948.

Mr. Cox: At this time I should like to offer du Pont Exhibit No. 464, which is a tabulation of the positions held by Mr. Carpenter in the du Pont Company from 1909 to date.

(Said document so offered and received in evidence was marked du Pont Trial Exhibit No. 464.)

By Mr. Cox:

Q. I think, perhaps, Mr. Carpenter might be given a copy of this exhibit.

Mr. Carpenter, this Exhibit, du Pont 464, shows that you were first regularly employed by the du Pont Company as a clerk in the purchasing department in Chile in December, 1909.

Had you had any kind of employment of any sort with the du Pont Company before that date?

A. In the three previous summers during college vacations, I worked on explosive plants in the du Pont Company in the State of New Jersey.

Q. Where did you go to college, Mr. Carpenter?

A. I went to Cornell University.

Q. Did you graduate?

A. No, I did not. I left there my senior year to go to Chile.

Q. Except for the slight addition which you have just given to us, does this tabulation on the basis of your present recollection accurately reflect the positions you have held with the du Pont Company?

A. It does, yes.

Q. This exhibit, Mr. Carpenter, shows that after having [fol. 6570] been employed in Chile, that you then held various positions in the Development Department of the du Pont Company; that you thereafter became treasurer, and that in 1940 you became president, the position which you held until January, 1948.

I should now like to direct your attention to your position as treasurer of the du Pont Company, and I ask you what your duties were as treasurer of the company?

A. The treasurer of the company has general charge of the Treasury Department, which in turn comprises Auditing and Accounting and the care of the funds and securities of the company, the relationships with the Internal Revenue Department, the preparation of financial and statistical data for the Finance Committee in connection with dividends, the payment of dividends, the forecasting of the cash requirements of the company, the recommendations with respect to provision for additional securities, and general financial matters concerning the company.

Q. Those were your duties as treasurer, a position which you held from January 10, 1921, to May 16, 1926?

A. Yes.

Q. After May 16, 1926, was there a change in the nature of your duties, Mr. Carpenter?

A. Well, I resigned from the treasurership and became vice president in charge of finance. In that position you are not in direction of the immediate affairs of the Treasury Department, but you have general supervision of the financial affairs of the company.

Q. Then on May 20, 1940, you became president?

A. Yes.

Q. What were your duties as president, Mr. Carpenter?

A. The duties of the president—he is the chief executive [fol. 6571] officer of the company, and he has general supervision and direction over the various affairs of the company and the carrying out of any wishes or orders of the two committees, the primary committees of the Board of Di-

rectors, namely, the Executive Committee and the Finance Committee.

And, of course, he has supervision of the general organization of the company..

Q. You continued to serve as president until January 19, 1948. At that time you became chairman of the Board of Directors, is that correct?

A. That is correct.

Q. What are your duties as chairman of the Board of Directors?

A. The chairman of the Board of Directors presides at the meetings of the Board of Directors and also at the stockholders' meetings.

He provides that the various committees of the Board are equipped with manpower and attempts to keep in general touch with the company affairs.

Q. Who succeeded you as president of the du Pont Company?

A. Crawford Greenewalt.

Q. Who elected Mr. Greenewalt president of the company?

A. He was elected by the Board of Directors.

Q. Who recommended him to the Board?

A. I did.

Q. Will you tell us why you recommended Mr. Greenewalt as your successor?

A. Mr. Greenewalt had served a valuable and brilliant career with the du Pont Company for about 25 years, I think, at that time. He had had experience in a number of departments in the company. He had been associated for a long while in connection with the research work, and in that [fol. 6572] capacity had been associated with a number of very important developments of the company.

He also had experience in the Development Department and in several of the industrial departments. During the period of the war, when we were so busy in connection with our atomic program, he served in a very important capacity in that connection.

He later became assistant general manager of one of the industrial departments, and from that position was selected for a position on the Executive Committee and a vice-president.

After a short time he was made vice-chairman of the Executive Committee and later, when he became president, he was also chairman of the Executive Committee, which he is at the present time.

Q. Mr. Carpenter, in one of your previous answers you have referred to the two committees of the Board of Directors of the du Pont Company, namely, the Executive Committee and the Finance Committee. I should like to ask you some questions about those committees and about the Board of Directors.

You have been a member of the Board of Directors, this Exhibit No. 464 shows, from May 1, 1919, to date. During that period have you regularly attended the meetings of the du Pont Board of Directors?

A. Yes.

Q. This same exhibit shows that you have been a member, or that you were a member, of the Executive Committee from May 1, 1919 to January 19, 1948; that from April, 1926 to May, 1940, you were vice-chairman of that committee, and from May 20, 1940 to January 19, 1948, you were chairman of that committee.

[fol. 6573] During that period of time did you regularly attend the meetings of the Executive Committee?

A. Yes, I did.

Q. The same exhibit shows that you have been a member of the Finance Committee from November 28, 1921 to date. During that period of time have you regularly attended the meetings of the Finance Committee?

A. Yes, I have.

Q. Mr. Carpenter, directing your attention to the Finance Committee, will you tell us briefly and generally what the functions and responsibilities of the Finance Committee are of the du Pont Company?

A. Well, the Finance Committee has largely the general responsibility for the financial affairs of the company. It is their responsibility and job to provide sufficient capital for the corporation's needs; to carefully supervise the financial affairs of the company; also to receive reports from time to time with respect to the earnings, provide for the declaration of dividends, and any other matters of a general nature involving any large policy questions in connection with the financial status and position of the company.

Q. What duties and responsibilities, if any, does the Finance Committee have in relation to the commercial operations of the du Pont Company?

A. The Finance Committee has no responsibilities with respect to that. There is this, perhaps, that might be said in that connection.

The Finance Committee has the approval of certain appropriations in excess of certain minimum amounts for extension of plant for use by the commercial departments. Also, I think, it has certain technical authority with respect to patent matters. But in general the entire responsibility [fol. 6574] for handling the commercial affairs of the company is lodged with the Executive Committee.

Q. While you have been a member of the Finance Committee of the du Pont Company, has it been a regular or consistent practice for that committee to discuss or consider matters involving the sale by du Pont of its products or the purchase by du Pont of products?

A. No.

Q. How often does the Finance Committee meet?

A. Twice a month.

Q. Directing your attention to the Executive Committee, tell us generally what the functions or responsibilities of the Executive Committee are in the du Pont Company?

A. The Executive Committee has complete responsibility with respect to the operations and sales and all collateral duties in connection with the carrying on of the commercial affairs of the company.

It also selects and places the individuals who are in charge of various departments. We have ten industrial departments of the company, and a number of staff departments. It selects the heads and approves the selection of the assistant heads of all of those departments.

It receives reports from time to time covering the activities of those several departments and any special report regarding extension or change in the operation or activities of those departments.

Q. You have referred in your answer to reports that are received by the Executive Committee from the industrial or operating departments.

Could you tell us whether those reports ever contain information about sales made by the operating department? [fol. 6575] A. Oh, yes. They always cover the sales made during the current month, and during the current year.

Q. Do they ever contain information about the sales made by the du Pont Company to particular or named customers?

A. I think they would include reference to any extraordinary activities in that connection.

Q. Do you recall whether the Executive Committee regularly and systematically received reports showing what percentage of their requirements certain customers of du Pont were buying from du Pont?

A. No, they would not contain that.

Q. Would those reports ever contain any information of that kind in an isolated or sporadic way?

A. Yes, I think they would cover reference to any special contracts which might be made with important customers.

The Court: May I have counsels' indulgence for a few moments, please?

(A recess was here taken.)

Q. Mr. Carpenter, you just finished testifying generally about the nature of the reports received by the Executive Committee.

I now ask you whether those reports are sent on by the Executive Committee to the Finance Committee?

A. No, they are not.

Q. How often does the Executive Committee meet?

A. They meet regularly once each week, and sometimes more often than that.

Q. Mr. Carpenter, I should now like to direct your attention to the investment which the du Pont Company holds in the stock of General Motors:

Is that investment or stock interest in General Motors [fol. 6576] under the supervision of any particular body or group in the du Pont Company?

A. Yes, it is under the supervision of the Finance Committee.

Q. Does the Finance Committee supervise all of du Pont's stock holdings in other companies?

A. No, I think that is about the only one. The rest are all under the supervision of the Executive Committee.

Q. Why is it that the General Motors' investment is supervised by the Finance Committee and du Pont's stock holdings in other companies are supervised by the Executive Committee?

A. Well, the other securities involve certain operating responsibilities. That is not true of the General Motors' securities.

Q. Will you tell us what you mean by "operating responsibilities" in that sense, Mr. Carpenter?

A. Well, perhaps I can give examples there. There would be securities of the Remington Arms, for instance, or Canadian Industries, Ltd., and the South American companies, and the Executive Committee recognizes that they have certain responsibility for following closely the operations of those companies, the industrial operations of those companies, and so those securities are directly in charge of the Executive Committee, and for that purpose.

In the case of General Motors investment we do not assume that there is any such responsibility as that, and also we regard it purely as a financial investment.

Q. Has du Pont's investment in General Motors been under the supervision of the Finance Committee throughout the period of time that you have been a member of the Finance Committee of the du Pont Company?

A. Yes.

[fol. 6577] Q. Has this distinction that you have described between du Pont's investment in General Motors and its stock holdings in certain other companies such as the Canadian Company and the Remington Company—has that distinction been observed so long as you have been a member of the Finance Committee?

A. Yes, it has.

Q. Now, exactly in what way does the Finance Committee of the du Pont Company discharge the responsibility it has for supervision of the investment in General Motors?

A. Well, the Finance Committee selects, informally, I think, the representatives from time to time to nominate as

members of the General Motors Board. The committee receives also the quarterly reports and in a general way follows the progress of the General Motors Corporation.

Q. What quarterly reports are those?

A. Those are the published quarterly reports.

Q. While you have been a member of the Finance Committee of the du Pont Company in the meetings that you have attended of that committee, have there ever been discussions about any aspects of the operations of General Motors?

A. Well, I think there have been discussions from time to time, yes, of the general progress of the General Motors Corporation.

Q. Have you discussed in the meetings with the Finance Committee of the du Pont Company what person should be nominated by the du Pont Company for membership on the Board of Directors?

A. Yes, we have.

Q. Can you tell, Mr. Carpenter, whether the persons so nominated have in every case been members of the Finance Committee of the du Pont Company?

A. So far as I can recall they have, with one exception.

Q. What is that, and who is that?

[fol. 6578] A. That exception is Mr. H. B. du Pont who is now a member of the Board of General Motors.

Q. Do you recall whether matters which were pending before the General Motors Board of Directors or the committees of the Board of Directors of General Motors were discussed in meetings of the du Pont Finance Committee?

A. I don't recall of any such instances.

Q. You have been a member of the Finance Committee of the Board of Directors of General Motors since 1927, have you not?

A. Yes, sir.

Q. And for a number of years you have served on certain committees of the Board of Directors of General Motors?

A. Yes.

Q. Now, while you were on the Finance Committee of

the du Pont Company, and while you were serving on the Board of Directors of General Motors, did the du Pont Finance Committee ever give you any instructions or directions as to how you should discharge your duties?

A. No, not at all.

Q. In your presence did the du Pont Finance Committee ever give such instructions or directions to any other person who was a member of the General Motors Board of Directors?

A. No.

Q. Specifically were any such instructions ever given to you—that is, instructions as to how you were to discharge your duties as a member of the Board of Directors of General Motors—by Mr. P. S. du Pont or by Mr. Lamont du Pont, or by Mr. Irene du Pont?

A. No, not in one instance.

[fol. 6579] Q. While you served on the Board of Directors of General Motors and its committees, Mr. Carpenter, how did you decide how to vote on matters that came before that Board of Directors and its committees?

A. Well, I assumed that I was member of the Board of Directors representing all of the stockholders of the corporation and I judged the matters on the merits of the programs that were put before us from time to time.

Q. Mr. Carpenter, does the du Pont Finance Committee receive any reports that show where or in what amounts General Motors is purchasing its requirements of various commodities?

A. No, nothing at all.

Q. Does it receive any reports showing what percentage of General Motors requirements of certain goods it buys from du Pont or buys elsewhere?

A. No, the du Pont Finance Committee receives no reports from General Motors except published reports.

Q. Do you recall now whether at the meetings of the du Pont Finance Committee which you attended, it was the practice of that committee to discuss questions relating to General Motors purchases of supplies?

A. No, we did not.

Q. In this connection, Mr. Carpenter, I should like to call your attention to a document which has been introduced in evidence in this case by the Government, marked Government's Trial Exhibit 460.

With this document before you, I should like to read to you the covering memorandum that appears on the first page of the document:

"At the last meeting of the Finance Committee the [fol. 6580] question of purchases by General Motors from du Pont was mentioned and I gathered that you were somewhat surprised at the statement that General Motors was not buying anywhere near all of their requirements of products which du Pont makes, from the du Pont Company."

This memorandum, you will note, is a memorandum from Mr. Lamont du Pont to Messrs. P. S. du Pont and J. J. Raskob, and is dated the 27th of January, 1927.

Now, Mr. Carpenter, with this memorandum in front of you, do you recollect the discussion referred to in this memorandum?

A. No, I don't recall that discussion, and I don't believe that matter could have come up in connection with any order of business. It might not even have come up during the meeting. Maybe it was before or afterwards that Mr. du Pont had spoken to his brother about that. It was certainly not a matter which would ordinarily be dealt with by the Finance Committee.

Q. Does this memorandum refresh your recollection as to other instances in which the matter of General Motors' purchases was discussed at the meetings?

A. No, I cannot recall any such instance.

Q. Does it refresh your recollection as to any instances in which discussions might have occurred before or after the meeting of the Finance Committee?

A. No.

Q. Does this memorandum lead you to wish to change the answer which you previously gave me to the effect that such matters were not frequently or regularly discussed in the Finance Committee?

A. No, sir, it does not.

Q. Now, reverting again for a moment to the deliberations or the actions of the du Pont Executive Committee as distinguished from the Finance Committee; do you now recall whether the Executive Committee systematically and regularly received reports showing what percentage of General Motors requirements of the products made by the du Pont Company, General Motors was buying from du Pont Company?

A. No, it does not.

Q. Did that committee ever receive estimates from the Operating Departments with respect to the percentage of General Motors' sales or requirements that the Operating Departments were selling at any particular time?

A. Well, as I have said, those reports occasionally contain advice of any new contracts of great importance, particular with important customers, and conceivably such comments might include an estimate of what the requirements of that customer might be and what percentage of the requirements it was intended it should be supplying.

Q. And while you were a member of the Executive Committee, did that committee, or to your knowledge any other agency in the du Pont Company, direct the Operating Departments or the Industrial Departments, as you called them a little while ago, to prepare and submit regularly reports estimating what percentage of the requirements of General Motors the du Pont Company was selling?

A. No.

Q. Did the Executive Committee ever receive any reports from General Motors showing what percentage of its requirements it was buying from the du Pont Company?

A. No, the Executive Committee received no reports from General Motors of any kind.

Q. Now, directing your attention to the Board of Directors of the du Pont Company, Mr. Carpenter, did the Board of Directors of the du Pont Company, while you were serving on that Board, ever receive any reports showing what percentage of General Motors' requirements it was buying from the du Pont Company?

A. No, it did not.

Q. Mr. Sloan was a member of the Board of Directors of the du Pont Company, was he?

A. Yes, for a number of years.

Q. Were you ever present at meetings which Mr. Sloan attended?

A. Very often.

Q. Did Mr. Sloan ever make any reports or comments on the operation of General Motors at those meetings of the du Pont Board?

A. Yes, Mr. Sloan regularly gave brief comments regarding the progress of General Motors.

Q. In those comments did he ever say anything about what percentage of its requirements General Motors was buying from du Pont?

A. Never.

Q. At those meetings of the Board of Directors of the du Pont Company, Mr. Carpenter, which Mr. Sloan attended, did you ever hear anyone give Mr. Sloan any advice or suggestions about how he should conduct the affairs of General Motors?

A. No, indeed.

Q. Now, Mr. Carpenter, I should now like to turn to another subject, and that has to do with the organization of the company known as the Managers Securities Company.

When did you first come in contact with the financial operations of the du Pont Company?

A. When I was first made treasurer, in the early part of 1921.

Q. That, the record shows, was in January, 1921.

Now, the record in this case shows that thereafter, that is to say about 1923, a company was organized known as [fol. 6583] the Managers Securities Company, and that certain of the stock in General Motors held by the du Pont Company was transferred to that company, that is the Managers Securities Company.

Do you remember that transaction, generally?

A. Yes.

Q. Were you consulted before that transaction was consummated?

A. Yes, indeed.

Q. Were you in favor of the transaction?

A. I was.

Q. Will you tell us why you were in favor of the transaction?

A. Well, the purpose of that transaction was to carry out a time-honored custom, at least for the du Pont Company, of endeavoring to interest important managers of the company in the stock of the company, in which they were engaged, in order that they might direct their interest for the welfare of that company and the improvement of its position and its earnings, and in that way benefit themselves.

Q. Before that transaction was consummated did you discuss the transaction with Mr. P. S. du Pont?

A. Oh, yes, it was dealt with in our Finance Committee in which they were all members.

Q. That is, P. S. du Pont was a member?

A. Yes, sir.

Q. And Mr. Lamont du Pont was a member and Mr. Irene du Pont was a member?

A. Yes.

Q. And did you ever hear any of those men say why they were in favor of this plan?

A. I don't recall any specific statements that they made in that connection, but I think we all realized why it was [fol. 6584] done, and it was very consistent with the policy which had been prevalent in the du Pont Company since the beginning of the century.

Q. Based on the discussions which you had with Messrs. P. S. du Pont, Lamont du Pont and Irene du Pont, can you now tell us whether in your recollection their reasons for favoring the plan differed in any respect from yours?

A. No.

Q. You mean their reasons were the same?

A. Their reasons were the same.

Q. Now, Mr. Carpenter, Paragraph 53 of the Amended Complaint in this case charges that the purpose of this project or plan involving the Managers Securities Corporation was to make the executives of General Motors, and now I quote from the complaint, "more directly responsive to the influences and desires of the du Pont Company."

Is that statement true or false?

A. I believe it is false. I am sure that it is false.

Q. Was that the purpose of the organization of the Managers Securities Company?

A. No, it was not the purpose. It was just the reverse of the purpose.

Q. What do you mean by saying that it was just the reverse of the purpose?

A. As I have already stated, the purpose of that program was to make these managers more interested in the prosperity and the future of the General Motors Corporation—not the du Pont Company.

It was designed that way, and I believe operated that way. You will recall that it took this form: The Managers Securities Company was formed, and it bought a 30 per cent interest in the General Motors Securities Company which at that time held substantially all of the du Pont's General Motors investment, constituting about seven and a [fol. 6585] half million shares. So that the 30 per cent interest that they bought in that company constituted a purchase of substantially 2,250,000 shares of General Motors.

They bought that on a deferred payment plan, at least in part. They paid about one-seventh of that price in cash, and the balance they paid in preferred stock of the Managers Securities Company.

That common stock of the Managers Securities Company was first purchased by the General Motors Corporation, and then by the General Motors Corporation sold at the same price to the about 80 managers of the corporation.

Now that transaction was originally made on the basis of substantially the market values. It was a very serious undertaking for these managers. They subscribed to this stock and paid cash for it in what was for them a very substantial amount, so that it was a purely arm's length transaction between the two. But that plan was designed so that these managers, putting cash in to the extent of about one-seventh of the full purchase price of the stock, were in the position of having the benefit of all the benefits that would flow towards substantially seven times the amount of their own investment. They had the opportunity to benefit by the appreciation in investment in General Motors stock

equal to about seven times their own initial investment; they had the opportunity of sharing the dividends on a comparable amount of investment in General Motors stock; and in addition to that as a result of the contract that was entered into between the General Motors Corporation and the Managers Securities Company, there flowed to the Managers Securities Company each year one-half of the total accruals [fol. 6586] under the General Motors Bonus Plan, so that you might say that they had this three-fold opportunity of enjoying the benefit of any increase in earnings of General Motors Corporation—through the appreciation of the securities, through the dividends on those securities, and also through the transfer of these bonus earnings which were in turn dependent upon the earnings of the General Motors Corporation.

So you had really—they had a sort of a three-fold pyramiding of the benefits flowing from the earnings of General Motors to themselves, and that operating, as I have referred to, on this seven-fold leverage which they gained over and above their initial cash subscription. All of that served as a powerful incentive to those men to interest themselves in the increase and the progress and the earnings of the General Motors Corporation.

It had absolutely no association at all with the du Pont Company. The du Pont Company might have gone bankrupt in that period without having any effect upon what the results to them would have been, or might have prospered greatly without any reflection on the flow of benefit to these 80 managers.

It is for that reason that I say it operated just in reverse of the way that it seems to be here represented.

Q. You mentioned in the course of your answer, I think, Mr. Carpenter, that this stock that du Pont transferred to Managers Securities Company was sold.

Do you recall how the price was fixed at which it was sold?

A. The price at which the General Motors stock was sold to the Managers Securities Company?

Q. Yes.

A. That was sold at substantially the current market. I [fol. 6587] think it was something of the order of \$15.00 a share at that time.

Q. Did the du Pont Company make or lose money on that sale, if you remember?

A. The sale of those shares corresponded substantially to the purchase of the Durant stock some years before that, and I think that the difference between the market price as of the date this was sold and the price at which those shares were initially purchased was something like \$4.00 a share, so that there did result a profit to the du Pont Company.

Q. Mr. Carpenter, I want to direct your attention to your activities as a member of the Board of Directors of General Motors. The record in this case shows that you have been a member of that Board of Directors since February 10, 1927.

Does that accord with your recollection?

A. Yes.

Q. Have you been a fairly regular attendant at the meetings of the Board of Directors of General Motors since you became a member?

A. Yes, I have.

Q. Will you tell us generally based on your attendance at those meetings, what the activities of the Board of General Motors have been, what it has done during this period of time?

A. Well, the Board of Directors has certain more or less formal requirements, such as the selection of the management of the company, the election of the officers, the declaration of dividends—perhaps I might give an account of a meeting of the Board of Directors.

We first have a review by the economist of the general economic conditions surrounding the industry at that time. After that we have quite a complete statistical review of the [fol. 6588] affairs of the corporation involving sales and labor problems and matters of that character, specific earnings and current earnings.

After that we have the receipt of the reports from the several committees of the Board, and then take any action on those which is necessary. Usually they do not require any special action other than their receipt.

Then we have a discussion by some of the officials of the

General Motors Corporation of the affairs in their departments.

Then we take any formal actions which are required, of course, for statutory purposes.

Q. Does the Board of Directors of General Motors have any responsibility with relation to the election of members of the Board; to fill vacancies on the Board?

A. Yes.

Q. What does it do in that respect, Mr. Carpenter?

A. With respect to vacancies?

Q. Vacancies on the Board?

A. Well the selection of the candidate to fill a vacancy is handled somewhat informally. The initiative of that effort usually heads up with the Chairman of the Board, Mr. Sloan. He usually consults various individuals for any suggestions.

The selection of those members of the Board from management who constitute sort of the management representation on the Board, that comes up more or less automatically as the men come up through the organization and assume more important positions in the operational activities of the corporation.

When they are eligible, or the Chief Executive Officer desires to make them members of the Executive Com-[fol. 6589] mittee, or what is now the Operations Policy Committee, then they are required to be members of the Board.

Those recommendations are brought before the Board more or less automatically, as I say, and approved by the Board.

Q. May I interrupt you there, Mr. Carpenter, to ask you whether in your experience a recommendation of that kind, that is to say recommendation of a management representative for membership on the Board, has ever been rejected by the Board of Directors?

A. No, never in my experience.

Q. Very well. Will you continue?

A. Then, in addition to that, there are certain men over

there who have been nominated to occupy positions on the Board by the Finance Committee of du Pont. There have been about five, as a rule, I think.

If any vacancy should occur in that group, then Mr. Sloan usually suggests that we nominate another to take that place.

Then, in addition to that, there are some representatives that are not connected with either of those groups, and Mr. Sloan consults with various people. He has suggestions of his own.

It has been Mr. Sloan's idea, I think, that we should attempt to increase the Board membership of General Motors by the selection of people from outside of either of the other groups, feeling, I think, that they might bring a fresh viewpoint to the Board, or something new, or perhaps a more objective viewpoint of the activities of General Motors.

There are, I should say, about four or five members in that group at the present time, and they, as I say, have been selected in this more or less informal way, and when a large [fol. 6590] group of Directors rather agree that the selection would be acceptable to the Board, that name is presented to the Board and that man is elected.

Q. Mr. Carpenter, in your answer you have referred to those members of the Board of General Motors who are nominated for membership on the Board by the du Pont Company. You stated that you thought the number was about five.

There is in evidence in this case at least one exhibit which indicates that in 1927, when you first went on the Board, six members of the Board were nominated by the du Pont Company.

Does that accord with your recollection?

A. Well, I can't recall offhand. I would say about five, it is in that neighborhood.

Q. I think the same evidence indicates that there are today five members on the Board who were nominated by the du Pont Company.

While you have been a member of the Board of Directors

of General Motors, has there to your knowledge been any agreement or understanding expressed or implied between du Pont and General Motors as to how many members of General Motors Board du Pont should nominate?

A. No.

Q. In your answer you also referred to the so-called outside directors, and you said that Mr. Sloan had from time to time been in favor of adding to that group:

Do you remember that statement?

A. Yes.

Q. Did you agree or disagree with Mr. Sloan on that [fol. 6591] point, if you remember?

A. I was in favor of that program.

Q. In this connection, Mr. Carpenter, I should like to show you two exhibits that were introduced in evidence by General Motors. They are documents which have been marked General Motors Exhibits 11 and 12. Each of these documents is a letter that you wrote to Mr. Sloan, and contains the names of certain persons that you suggest in the letter might be considered for nomination to the Board of Directors of General Motors.

Do you recollect that correspondence?

A. Yes, I do.

Q. How did you happen to write these letters to Mr. Sloan? Why did you write them?

A. I think Mr. Sloan asked me if I would do that, make some suggestions of names that might be tossed into a pool from which a directorate might eventually be selected.

Q. Do you know whether Mr. Sloan asked any other members of the General Motors Board for suggestions?

A. I don't know to what extent he asked all of the members. I know that he did ask some of the members, and occasionally we would get together in a group and discuss names and toss in new names to be considered.

Q. Now, on what basis did you select the names that you listed in these letters to Mr. Sloan?

A. Well, as I told Mr. Sloan, I think, in this letter that I was not recommending all of these people; that there were many of them, quite a number of them that I didn't even know.

I in turn had consulted with others and looked up the record on some of these gentlemen, and their age classification, and sent the names along to be considered with others. [fol. 6592] Looking at this list and then recalling the selections, I had a very poor batting average.

Q. To what extent in including names in this list were you influenced by the person's attitude to the du Pont Company?

A. Not at all.

Q. In selecting names for the list, did you take into account the person's probable attitude toward the purchase by General Motors of du Pont products?

A. No, indeed.

Q. Mr. Carpenter, I believe in one of your previous answers you mentioned the fact that the Board of Directors of General Motors elects the officers of the company, is that right?

A. Yes.

Q. Does it elect the president of General Motors?

A. Oh, yes.

Q. You became a member of the General Motors Board in 1927. At that time the record shows Mr. Sloan was president. Do you recollect that?

A. Yes.

Q. Thereafter the Board did elect certain presidents, did it not, in the succeeding years?

A. Yes.

Q. I think the record shows that Mr. Knudsen was president for a time?

A. He was.

Q. That thereafter Mr. C. E. Wilson was president?

A. Yes.

Q. And he was succeeded more recently by Mr. Curtice. Do you remember the election of those men?

A. Yes, I do.

Q. Now, directing your attention to those men, Messrs. Knudsen, Wilson and Curtice, who recommended them to the General Motors Board for presidency of the corporation?

A. I think in the case of Mr. Knudsen and in the case of Mr. Wilson, the recommendation was from Mr. [fol. 6593] Sloan. My recollection is that Mr. Wilson recommended Mr. Curtice.

Q. Was any one of these men a nominee of the du Pont Company?

A. No, indeed.

Q. Had Mr. Knudsen or Mr. Curtice or Mr. Wilson, to your knowledge, ever had any connection with the du Pont Company in the sense of having been employed by it or served on its Board, or anything of that kind?

A. Not at all.

Q. In your previous answer you have referred to the reports that are made to the Board of Directors of General Motors. Do those reports cover the detailed operations of the company?

A. The reports of the General Motors Board?

Q. Yes.

A. No, they cover merely the minutes of the meetings of the Board committees, unless there is something specific that requires approval, such as an employment plan or pension plan or something of that nature which would be more in detail.

Q. Does the Board of Directors of General Motors supervise or direct the day-to-day conduct of the company's business?

A. No, it does not.

Q. Does the Board of Directors of General Motors make any decisions on engineering or marketing or purchasing practices and policies?

A. No.

Q. In your experience has the Board of Directors of General Motors ever considered any question relating to where or in what amount General Motors should purchase supplies that it uses in its operations?

A. Not at all.

Q. Have there ever been any discussions in the Board of Directors of General Motors of General Motors' pur-

[fol. 6594] chases from the du Pont Company or from its competitors?

A. Never in my presence, no.

Q. Has there ever been any discussion in those meetings of General Motors of purchases from the United States Rubber Company or its competitors?

A. The only case that I can think of in that connection might be that when the initial contract was made with the Rubber Company, it embodied very substantial financial commitments, which I believe required that it come before the Finance Committee of General Motors, which, in itself was rather unusual, and no doubt was at that time reported by the Finance Committee to the Board.

I recall no discussion in the Board, but it was probably before them.

Q. Apart from that instance, do you recollect any other incident where General Motors purchases from United States Rubber was the subject of consideration by the Board of Directors?

A. No, never.

Q. Mr. Carpenter, you have referred in one of your previous answers to the committees of the Board of Directors of General Motors. The record in this case shows that you had been a member of the Finance Committee of General Motors from February 10, 1927 to May 3, 1937.

Did you regularly attend the meetings of the Finance Committee during that period?

A. Yes, I did.

Q. I think the record also shows that you were a member of the Policy Committee of General Motors from May 3, 1937 to June 3, 1946.

During that period of time, did you regularly attend the [fol. 6595] meetings of that committee?

A. Yes, I did.

Q. The record also shows that you were a member of the Financial Policy Committee of General Motors from June 3, 1946 to June 6, 1949. During that period of time did you regularly attend the meetings of the Financial Policy Committee?

A. Yes, I did.

Q. Now I should like to ask you some questions about the functions of these different committees, and I shall begin with the Finance Committee, which was a committee that existed and on which you served from 1927 to 1937.

What, in general, were the functions and responsibilities of the Finance Committee of General Motors?

A. The Finance Committee had general responsibility for the financial aspects of the General Motors business. It had the provisioning of sufficient capital for its purposes, watching its earnings position, receiving from time to time reports on the financial status which would enable it to declare dividends or recommend dividends to the Board of Directors; also provide for any matters of a general overall character concerning the financial position and requirements of the General Motors Company.

Q. Did it direct or manage the financial affairs of the corporation in a direct way?

A. No, that was done through the financial officers who reported to the Finance Committee. I might say that the Finance Committee also had the responsibility of approving certain large appropriations which may have been approved in advance by the Executive Committee for the construction of new plants or going into new business, or anything of that character.

Q. Do you recall that General Motors had a bonus plan [fol. 6596] in the period of time that we are now talking about?

A. Yes.

Q. Did the Finance Committee have any responsibilities under that bonus plan?

A. Yes. The Finance Committee did administer that plan under the terms of the bonus plan itself, which meant that it made provisions for deciding the amount of bonus which was to be set within the limits of the plan, and then later received from the Chief Executive Officer of the corporation recommendations with respect to the distribution of that.

It provided for the acquisition of stock for distribution under the bonus plan and all necessary work in connection with the administration of the plan in accordance with the written plan.

Q. Do I understand your answer to mean that the Finance Committee received from the chief executive officer of the corporation recommendations as to the individual awards or allotments that were to be made under the Bonus Plan?

A. Yes.

Q. Now, what did the Finance Committee do about those recommendations?

A. The Finance Committee discussed them in a general way with the person who had recommended them, and then of course the Finance Committee was obliged under the plan to approve it.

Q. Do you recall whether the Finance Committee in practice changed or modified or revised the recommendation made by the chief executive officer?

A. Very seldom.

Q. Did you personally participate in that consideration of the bonus recommendations?

A. Yes.

Q. To what extent, if at all, in that consideration did you take into account the attitude of the persons who were [fol. 6597] being considered for bonus awards toward the du Pont Company?

A. Not at all.

Q. Did you ever take into account the attitude of those persons toward the products of the du Pont Company?

A. Toward the what?

Q. Products of the du Pont Company?

A. No, indeed.

Q. Now, did the Finance Committee have any responsibility in relation to the day-to-day operation of General Motors?

A. Merely the financial aspects of it; that responsibility rested on those financial officers, as I have said, who reported to the Finance Committee.

Q. Did it ever consider or decide questions relating to the marketing or production of the company's products?

A. No, it did not.

Q. Did it ever consider questions relating to the purchasing practices of the company?

A. Not at all.

Q. Do you recall whether the Finance Committee ever passed on any questions relating to sales by the du Pont Company to General Motors?

A. I am sure it did not.

Q. Were those sales discussed in meetings of the General Motors Finance Committee?

A. No, never.

Q. In one of your previous answers, you have referred to the fact that the first contract for tires, that is the contract made roughly, I think, in 1931 between United States Rubber and General Motors was submitted to the Finance Committee of General Motors.

Do you recall your previous answer on that?

A. Yes.

Q. Do you know whether or not that contract before it was submitted to the Finance Committee had been approved or considered by the Executive Committee of General Motors?

A. Yes, it had.

[fol. 6598] Q. Now, aside from that incident, do you recall any other incident in which the Finance Committee of General Motors considered questions relating to purchases or sales between General Motors and the Rubber Company?

A. No, I cannot.

Q. Mr. Carpenter, you previously testified, as the record shows, that you have been a member of the Financial Policy Committee from the time when it was formed until a date in 1949.

To what extent, if at all, did the activities and functions and responsibilities of the Financial Policy Committee differ from those of the Finance Committee?

A. When the policy committee was set up—

Q. Mr. Carpenter, I am sorry. I am not asking you about the policy committee, but about the Financial Policy Committee.

A. Oh, subsequent—

Q. Subsequent to the policy committee.

A. That would be from 1946 on.

Q. That is right.

A. Well, that was substantially exactly the same as those of the Finance Committee, with this exception: That in 1937, I think, the Board set up a special committee called the Bonus and Salary Committee, and that committee thereafter took over all of the bonus responsibilities that theretofore had been carried on by the Finance Committee. With that exception, I think the Financial Policy Committee was just the same as the previous Finance Committee.

Q. Did the Financial Committee, and does the Financial Policy Committee pass upon the purchase practices or policies of General Motors?

A. No.

Q. In the meetings of that committee, have you ever [fol. 6599] heard any discussion of General Motors purchases from du Pont Company?

A. Never.

Q. Or from the United States Rubber Company?

A. No.

Q. Now you have referred to this Bonus and Salary Committee. Did you serve on that committee, Mr. Carpenter?

A. Yes, I served on that committee when it was initially set up in 1937 for a period of four, five, or six years. I can't recall just how long.

Q. In what respect, if at all, did the operations of that Committee differ from the operations of the Finance Committee so far as they related to the bonus plan? Did it operate in substantially the same way?

A. Yes, it did. I think perhaps it went into matters somewhat more fully than the Finance Committee had theretofore done. It was their specific job.

Q. Do you recall whether that committee, that is, the Bonus and Salary Committee, in practice revised or changed or modified the recommendations made by the chief executive officer as to the individual awards?

A. Very seldom.

Q. In your deliberations as a member of that committee, to what extent, if at all, were you influenced by your views as to the attitude of a possible recipient of awards toward the du Pont Company?

A. Not at all.

Q. In the consideration you gave the matters that came before that committee, were you in any degree influenced by the individual's attitude toward the products of the du Pont Company?

A. No, I was not.

Q. Mr. Carpenter, the record shows that the Finance and Executive Committees were abolished in 1937, and that thereafter a single committee called the Policy Committee [fol. 6600] was in existence. Do you recall that change in the organization of General Motors?

A. Yes, I do.

Q. That arrangement lasted, the record shows, until 1946, and you were a member of that committee, you have testified, and regularly attended its meetings?

A. I was.

Q. Now what were the functions and responsibilities of the Policy Committee, Mr. Carpenter? What did it do?

A. The Policy Committee was organized to take over the responsibilities theretofore performed by the Executive Committee and the Finance Committee.

It was believed that whereas before that time the responsibilities to be dealt with could be divided on the one side between operating matters and on the other side between financial matters, the theory that Mr. Sloan, who advocated this Policy Committee, had, was that in this particular committee we could make that division between the so-called high policy or policy matters as distinguished from administrative matters, and that that committee could deal with matters of important policy and philosophy dealing with both operations and finance.

In that respect it did operate. The Executive Committee, which had theretofore existed, was replaced in very large part, however, by the creation of an Administration Committee, which was technically, I suppose, not a creation of

the Board but was a committee organized to handle most of the operating matters, and that committee reported to the Policy Committee.

Q. Were you a member of this Administration Committee?

A. No, I was not.

[fol. 6601] Q. Was any member of the General Motors' Board, who had been nominated for membership on the Board by the du Pont Company, a member of the Administration Committee?

A. No.

Q. Did the Policy Committee in practice manage the day to day operations of General Motors?

A. Oh, no.

Q. Did it direct or supervise the purchasing practices of General Motors?

A. No, it did not.

Q. Did it consider questions relating to the purchases by General Motors of products from du Pont?

A. No, it did not.

Q. Or purchases by General Motors of products from United States Rubber Company?

A. No, it did not.

Q. Do you recall whether in the meetings of the Policy Committee you ever heard any discussion of General Motors' purchases from the du Pont Company?

A. I am positive I never did.

Q. Do you recollect whether you ever heard any discussion in those meetings of General Motors' purchases from the Rubber Company?

A. No, I did not hear any.

Q. Mr. Carpenter, before you became a member of the Board of Directors of General Motors in 1927, did you consider whether you should or should not undertake to serve as a member of that Board? Did you give that matter any thought?

A. I think I did when I was asked to serve.

Q. Can you tell us now why you decided to accept the responsibility of serving as a director on the Board of General Motors?

A. Well, I recognized that the du Pont Company had a very serious responsibility with respect to that enormous investment. It owed that duty to its stockholders, and there was a job to be done there.

[fol. 6602] The Finance Committee felt that that job could best be done by nominating representatives to the Board who could in turn serve on the Finance Committee of General Motors. Others had done it before me. I was a member of the Finance Committee, had been long associated with the financial matters of the company, and it seemed to me a very natural thing that I should serve, and I was very happy to serve.

Q. To what extent, if at all, Mr. Carpenter, in making that decision were you influenced by any desire or purpose to sell du Pont's products to General Motors?

A. Not at all.

Q. While you have been a member of the Board of Directors of General Motors and have served on its committees, on what basis have you tried to deal with the questions that came before the Board and its committees?

A. I dealt with them entirely on the basis of my judgment of the merits of the particular programs that were submitted to us.

Q. In your discharge of those duties, what distinction, if any, have you drawn between du Pont as a stockholder in General Motors and the other stockholders?

A. Absolutely none.

Q. What distinction exists, if any does exist, in your concept of your duty as between a duty to du Pont and a duty to the other stockholders of General Motors?

A. None at all.

Q. While you have served on the Board of General Motors and on its committees, Mr. Carpenter, what aspect of General Motors' affairs have you been particularly [fol. 6603] interested in?

A. I think more particularly in their financial aspects.

Q. Have you ever attempted to give anyone in General Motors any advice about the production and distribution of motor cars?

A. Oh, indeed I have not.

Q. Have you ever attempted to give anyone in General Motors any advice about where he or the corporation should buy its requirements of particular products?

A. Never.

Q. Mr. Carpenter, I should like now to turn briefly to another subject, and ask you a very few questions about some other corporations that are involved in this case.

I think the record here shows that you are a stockholder in Christiana, is that correct?

A. That is correct.

Q. I think the record also shows that you are a director of that company?

A. I am now.

Q. Do you recall who asked you to become a director of Christiana?

A. I think Lamot du Pont.

Q. What did he say to you when he asked you to become a director?

A. He just asked me whether or not I would be willing to serve, I think.

Q. With respect to the Christiana stock that you own, are you now a party to any agreement that restricts in any way your right to vote that stock in any way you see fit?

A. No, I am not.

Q. Are you a party to any agreement that restricts your right to dispose of any stock in any way you see fit?

A. No, I am not, and I have disposed of stock in Christiana from time to time.

Q. You have disposed of shares of stock from time to time?

A. I have.

Q. Have those disposals been made to members of your [fol. 6604-6607] family, Mr. Carpenter?

A. No, I have made certain charitable awards through that means.

Q. Have you ever been a shareholder, officer, or director of the Delaware Realty Company?

A. No, I have not.

[fol. 6608] Q. Mr. Carpenter, at this point I should like to call your attention to certain allegations that are made in the amended complaint in relation to the relations that existed between General Motors and du Pont Company, and I should like to begin by calling your attention to certain allegations that are found in Paragraph 64 of the Amended [fol. 6609] Complaint, and I should like you, if you will, to listen while I read these allegations to you, because I intend to ask you some questions about them.

Paragraph 64 alleges that:

"The du Pont Company following its acquisition of control over General Motors in or about 1917, not only extended its operations into the manufacture of paints and varnishes and related products, but also began expanding into other areas in the chemical field."

Now; this is the part of the allegation to which I wish to call your attention, the part I am about to read:

"In connection with this expansion, du Pont Company entered into an agreement with General Motors to the effect that the latter would refrain from the manufacture of chemicals, including paints and varnishes and similar products, leaving this field, as between the two companies, exclusively to du Pont Company."

To your knowledge, Mr. Carpenter, did any agreement of that kind exist between the du Pont Company and General Motors while you have been an officer and director of the du Pont Company?

A. There has not.

Q. To your knowledge does any such agreement exist today?

A. It does not.

Q. Now, this paragraph goes on to allege, and I read again:

"It was further agreed between the two companies that when General Motors made discoveries in the [fol. 6610] chemical field, it would inform du Pont Company of the findings and grant to du Pont Company exclusive development, production, and exploitation rights with respect to such discoveries."

To your knowledge, Mr. Carpenter, was there ever any such agreement between the two companies while you were an officer and director?

A. There never was.

Q. To your knowledge is there such an agreement today?

A. No.

Q. The same paragraph then goes on to allege:

"It was also understood that if any of said General Motors' discoveries were usable in General Motors' operations, du Pont Company would, after their development, make them available to General Motors Company for use upon an exclusive or preferential basis."

To your knowledge, Mr. Carpenter, was there ever any such agreement between the two companies while you were an officer or director of the du Pont Company?

A. There never was.

Q. Is there such an agreement today, to your knowledge?

A. There is not.

Q. And finally in this paragraph it is charged as follows:

"It was further understood that if du Pont Company made discoveries in the chemical field which might be of use in the production of automobiles, du Pont Company would promptly inform General Motors of its findings and grant to General Motors preferential rights with respect to such discoveries and General Motors would aid in the experimental work on such discoveries."

[fol. 6611] Mr. Carpenter, did such agreement exist between the two companies while you were an officer and director of the du Pont Company?

A. There did not.

Q. To your knowledge does any such agreement exist today?

A. It does not.

Q. Now, Mr. Carpenter, in answering these questions that I have asked you, do you remember Article 7 of an agreement establishing the Kinetic Chemicals, Inc., that agreement having been made a part of the record in this case?

A. Yes, I am familiar with that.

Q. Do you recall Article 7 of that agreement?

A. Yes.

Q. In the light of that article, do you wish to change or modify the answer that you have previously given to my question?

A. No, I do not.

[fol. 6612] Direct examination (Continued)

By Mr. Cox:

Q. Mr. Carpenter, just before lunch I asked you a question about Article 7 of the agreement establishing Kinetic Chemicals, Inc. in 1930.

Did you personally suggest that that article be included in that agreement?

A. No, that was the suggestion of General Motors at the time the contract was being negotiated.

Q. Do you know whether any discoveries or inventions were ever turned over to Kinetic Chemicals pursuant to the provisions of that article?

A. None were turned over.

Q. Do you recall whether General Motors ever suggested to du Pont that Article 7 be canceled?

A. Yes, they did.

Q. Did that request come to your attention at the time it was made?

A. Yes, it did.

[fol. 6613] Q. Can you tell us what attitude the du Pont Company took when it received that request?

A. We took the position that if they wished to eliminate it, it was agreeable to us.

Q. Was it or was it not eliminated?

A. It was eliminated.

Q. Mr. Carpenter, I now wish to turn to the question of sales by du Pont to General Motors, and I should like to ask you whether you have been aware over the years that General Motors has been a substantial customer of the du Pont Company.

A. Yes, I have.

Q. The amended complaint in this case makes certain charges with respect to those sales, and I should like to read these charges to you. I must ask you to listen to them

because I shall ask you some questions about them afterward.

I am going to begin with Paragraph 56, of the amended complaint. That paragraph charges as follows:

“Beginning in 1917, it was understood and agreed between General Motors and du Pont Company that, because of the latter’s acquisition of control over General Motors, General Motors would give preference to du Pont Company in buying products for use in its operations. It was agreed that General Motors would purchase from du Pont all or substantially all of its requirements of products manufactured by du Pont, and would refrain, in whole or in large part, from purchasing such products from competitors of du Pont Company.”

Mr. Carpenter, to your knowledge while you have been [fol. 6614] an officer and director of the du Pont Company, has any such agreement or understanding, express or implied, existed between du Pont and General Motors?

A. It has not.

Q. Paragraph 62 of the Amended Complaint makes a further charge about this alleged agreement. That paragraph charges as follows:

That paragraph charges that this previous alleged agreement, the charges about which I have just read to you:

“... was subsequently modified so as to permit General Motors to purchase from 20 to 25 per cent of its requirements of the products du Pont manufactured which General Motors used from companies other than du Pont, leaving du Pont with 75 to 80 per cent of the General Motors business.”

Now, to your knowledge, Mr. Carpenter, while you have been an officer or director of the du Pont Company, has any such agreement as that existed between the two companies?

A. It has not.

Q. To your knowledge has there been any agreement over that period of time of a general and continuing nature that obligated General Motors to buy any stated percentage of all of the products it uses that are manufactured by du Pont from du Pont?

A. No.

Q. Mr. Carpenter, the record in this case discloses the existence of certain contracts between du Pont and General Motors under which General Motors bought its requirements or part of its requirements of certain specific commodities for certain limited periods of time from the du Pont Company.

[fol. 6615] Are you aware in general of the fact that such arrangements have existed from time to time in the past?

A. Yes.

Q. If I may now direct your attention not to those particular contracts, but to any general, continuing contract or understanding, has there been any such contract or understanding, expressed or implied, that General Motors over the years would buy all or any part of its requirements from the du Pont Company?

A. There has not.

Q. In this connection, Mr. Carpenter, I should now like to call your attention to certain documents which were introduced in evidence by the government in this case. They bear Government's Trial Exhibits Nos. 420 and 460.

Again I think it will not be necessary for you to read these documents in detail because I believe I can characterize them in a way that will not be objectionable to government counsel.

If you will examine these documents in a general way, you will see that each of them contains a computation or an estimate as to the percentage of requirements of certain commodities that certain divisions of General Motors are buying from the du Pont Company.

You have seen these documents before, have you?

A. Yes, recently.

Q. In preparation for your testimony in this case?

A. Yes.

Q. While you were president of the du Pont Company, Mr. Carpenter, did you receive reports of this kind, that is to say, reports, which showed how much of their requirements the various divisions of General Motors were buying from the du Pont Company?

A. No.

[fol. 6616] Q. Did you ask to have such reports made by anyone in the du Pont Company when you were president?

A. No, I did not.

Q. You have testified, I believe, that in the case of the

reports submitted by the operating or industrial departments to the Executive Committees, you recollect generally that sometimes those reports contained some information similar to the information in the documents, did you not?

A. Yes.

Q. Do you know now whether in collecting such information the operating or industrial departments followed any practice in relation to General Motors that differed in any respect from the practice those departments followed with respect to other important customers of du Pont?

A. No, I know of no difference.

Q. I should also like to call your attention to another incident that is reflected in Exhibits which the Government has introduced in this case. Merely for the purpose of identifying these exhibits and not because I think it is necessary that you examine them. I shall state for the record that they are Government Trial Exhibits 363 to 367, inclusive.

These documents relate to an incident which occurred in 1926 when Mr. Lamot du Pont sought and obtained from Mr. Sloan permission to disclose to a Mr. Allen of the du Pont Company certain production schedules which Mr. Lamot du Pont had received as a member of the finance committee of General Motors.

Have you had occasion to examine these documents in preparation for your testimony?

A. Yes, I have seen them.

Q. Mr. Carpenter, while you were president of the [fol. 6617] du Pont Company, did you ever secure any production information from General Motors and pass it on to people in the operating departments of du Pont Company?

A. No, I did not.

Q. Did you, as a member of the Finance Committee of General Motors, receive production schedules or production estimates from the operating divisions or departments of General Motors?

A. Yes, we did.

Q. What did you do personally with those reports that you have seen?

A. Well, I read them in preparation for their discussion at the meeting, and later returned them to General Motors.

Q. Did you ever disclose or exhibit those reports to anyone in the operating departments of du Pont?

A. No.

Q. Did you ever show those reports to the other members of the Finance Committee of the du Pont Company?

A. No.

Q. There is another document to which I should like to call your attention, Mr. Carpenter, which has been introduced in evidence by the government in this case. That is a document which bears Government's Trial Exhibit No. 537.

This document reflects a resolution or decision taken by the General Purchasing Committee of General Motors in 1924, and I call your attention to the last paragraph of that document, which I shall now read to you.

It reads as follows:

"Finally it was agreed that as a practice General Motors could not undertake to supply information [fol. 6618] showing the volume of business done with any suppliers to the du Pont Company but that in special cases, upon request by the President of the du Pont Company to the President of General Motors, the situation would be properly dealt with, and that if the du Pont Company were to furnish to General Motors a list of suppliers whom it is desired to favor with inquiries, our divisions would endeavor to meet their wishes in this regard."

Mr. Carpenter, when you first became president of the du Pont Company, was this resolution or decision of the General Purchasing Committee of General Motors called to your attention?

A. No.

Q. When did you first learn of this decision or resolution?

A. Just a few days ago.

Q. While you were president of the du Pont Company, did you ever request the president of General Motors for information about the volume of business done by General Motors with any of its suppliers?

A. No, I did not.

Q. Mr. Carpenter, while you were president of du Pont, were there any assignments or transfers of persons employed by the du Pont Company to important positions in General Motors?

A. No.

Q. To your knowledge are there now any positions of responsibility or power in General Motors held by any persons who have ever held positions of responsibility in the du Pont Company?

A. No.

Q. There are certain members of the Board of Directors of General Motors who are directors of the du Pont Company?

A. Oh, yes.

Q. My question is directed to the management of General Motors.

A. That is what I thought you were inquiring about.

Q. Mr. Carpenter, have you personally, quite apart from your activities as a member of the Board of Directors of General Motors and its committees, ever undertaken to talk to anyone in General Motors about its purchasing practices and about where it obtained its supplies?

A. No, I never have spoken a word to anyone on that subject.

Q. Have you ever attempted to persuade anyone in General Motors not to buy from any competitor of the du Pont Company?

A. Never.

Q. The complaint charges that generally for the period of more than thirty years there has been an agreement or understanding between du Pont and General Motors that General Motors would favor du Pont in purchasing the commodities made by du Pont that General Motors required.

It is also alleged that there was a conspiracy or agreement that General Motors would refrain from entering the fields of production in which du Pont was engaged.

I now ask you generally whether to your knowledge any such agreement as that existed at any time while you have been president or while you were an officer or director of the du Pont Company?

A. There has never been any such agreement.

Q. Have you personally ever taken any steps to carry out or to order anyone else to carry out any such agreement or understanding?

A. I have not.

Q. The complaint also charges in general terms that there was in effect a similar arrangement, a combination or [fol. 6620-6622] conspiracy between the United States Rubber Company and the du Pont Company?

I ask you generally whether to your knowledge any such agreement existed while you were an officer or director of the du Pont Company?

A. No such agreement ever existed.

Q. And I also ask you whether you personally have ever done anything to carry out or ordered anyone else to carry out such an understanding?

A. I have not.

[fol. 6623-6625] Cross Examination

By Mr. Harsha:

Q. Yes. Now, you touched upon the manner in which the du Pont representatives on the General Motors Board were—I believe you said “discussed” and suggested by the Finance Committee of du Pont, and you mentioned that there had been usually five—I think there was one instance called to your attention that the du Pont Company had six so-called du Pont representatives on the General Motors Board.

Do you recall that?

A. That is correct.

Q. Now, how was the number five or six directors representing the du Pont Company—how was that determined by the du Pont Company, if you know?

A. I think it just grew up that way. I don't think there was any mathematical approach to that, or any specific decision with respect to the number. It just happened that way. Today I don't know why there should be just five and not four or six.

Q. Was it thought by the Finance Committee of du Pont that that was an adequate amount of representation to have on the General Motors Board?

A. I think so.

[fol. 6626] Q. Passing along on the same page that I referred to, page 3, that is numbered at the bottom of the page and it states that:

"Mr. du Pont feels that the best manner in which to attain the greatest success possible in the conduct of the affairs of the General Motors Corporation is for that Corporation to interest its principal men in the Corporation as substantial stockholders or partners. [fol. 6627] He not only feels this very keenly, but feels too that the du Pont Company with its large and controlling interest in the General Motors Corporation has now a splendid opportunity to enhance the value of its own investment in the General Motors Corporation through giving to the General Motors Corporation an opportunity to interest its important employees as managing partners in this great enterprise."

Would you state that was an accurate statement of the objectives of the Managers Securities Plan, Mr. Carpenter?

A. Yes, the purpose of the Managers Securities plan was certainly to enhance the value of our investment.

Q. And would you call the reference to the managing partners—would you call that an accurate reference?

A. Well, I think that is an informal use of the words, perhaps.

Q. Now, would you say that as a result of the Managers Securities Plan that one of its results was to create or make for a greater loyalty among the top management to General Motors?

Mr. Cox: What is the question?

(Question read.)

Mr. Cox: Mr. Harsha, I am not going to object to the question, but I am not clear on it.

Mr. Harsha: Let me rephrase it.

Mr. Cox: I was not clear whether you were asking him for the state of mind of the employees of General Motors or for the purpose of the Plan.

Mr. Harsha: Let me see if I can rephrase it a little more accurately.

[fol. 6628] By Mr. Harsha:

Q. Would you say one of the purposes of the Managers Securities Plan as you understood it was to make for a greater loyalty among the top management of General Motors to those in control of General Motors?

A. No, only to the General Motors Corporation.

Q. Only to the corporation?

A. Yes.

Q. Would you say that it tended to create a greater enthusiasm among the top management for the policies determined in General Motors?

A. Well, I think the idea was intended to create a greater enthusiasm for the enhancement of the prosperity and the earnings of General Motors as a whole, whether or not they might be directed for one moment to the specific item that you mentioned, or something else, and I would rather refer to the general purpose of the plan.

Q. And it is, of course, true that at this time du Pont was the largest single stockholder in General Motors?

A. That is correct.

Q. And was it your understanding that it was Mr. Pierre du Pont who suggested that this Managers Securities Plan be worked up?

A. I don't recall who made the original suggestion, whether it was Mr. Raskob or Mr. Pierre or Mr. Brown. I think perhaps they all worked it out together.

Q. Well, you will note that in the last sentence of that paragraph we have just been looking at on page 3, it states at the very end of that sentence, "And Mr. du Pont there- [fol. 6629] fore requested that a plan be developed to accomplish this object."

A. It does appear that that is there.

Mr. Harsha: Would you show Mr. Carpenter Government's Exhibit No. 167, please?

By Mr. Harsha:

Q. This is a memorandum by Mr. Raskob to the Finance Committee of the du Pont Company dated January 30, 1922, and I believe you previously indicated that you were a member of the Finance Committee of du Pont at this time?

A. That is correct.

Q. And it states in the first paragraph:

"Recently the du Pont American Industries, Inc., which held a large block of Chevrolet Motor Company stock, surrendered that stock to the Chevrolet Motor Company for exchange of General Motors Corporation common stock, on the basis of one share of Chevrolet for $14\frac{1}{3}$ shares of General Motors Corporation common stock and the du Pont Company likewise exchanged its Chevrolet holdings at that time. In addition to this our friends exchanged their stock, so that today the Chevrolet Motor Company is without the control of our company and its friends."

I draw your attention that there is a proposal recommended later on in this memorandum, and I believe you will find that your name appears as one of those signing the approval.

Do you see that in the lower left hand corner?

A. Yes.

Q. Now directing your attention to this sentence I have just read, in which it states that "So that today the Chevro-[fol. 6630-6632] let Motor Company is without the control of our company and its friends," can you tell us to whom the expression friends of the du Pont Company refers? Does that mean the Morgan Company?

A. Well, I can't tell who that is, Mr. Harsha. I just don't know at the moment.

Q. Do you have any recollection?

A. No. My recollection is, and it is rather hazy, that the Chevrolet Company at that time was more or less in the course of dissolution, and this letter indicates that Mr. Raskob has found that the ownership of the stock in that company has gotten down to 45 percent, and he feels that does not constitute control, and therefore makes the recommendation that we repurchase six percent in order to establish control.

Q. You have no recollection as to who the "friends" are that are referred to here?

A. No, I don't.

Q. Wasn't the Nobel industry a large investor in General Motors stock about this time?

A. The Nobel became interested first, I think, at the time of that common stock issue of some \$36,000,000 of new stock.

Q. That was about 1920, was it not, sir, if you recall?

A. Perhaps 1920. I don't think that would have involved them in the Chevrolet Company. Well, the fact is I just don't know the answer to your question, Mr. Harsha.

[fol. 6633-6645] Q. Was there any discussion of Mr. Ireneé du Pont's statement that "it would seem distinctly advantageous if Mr. Sloan were on the du Pont Board," if you recall?

A. I presume this report in this form was discussed and that is what it says, Mr. Harsha.

Q. You have no independent recollection of a discussion?

A. No, I don't really.

Q. Was anything said as far as you can recall as to why it would be advantageous to du Pont to have Mr. Sloan on the Board of the du Pont Company?

A. Well, he cites the two reasons: because of our interest in General Motors, and because he is an excellent man who would contribute strength.

The second one is perfectly obvious. I think the first one was that through his presence there, he might give us from time to time a general report on the progress of General Motors, and that, as was brought out this morning, has been done consistently over the period.

[fol. 6646] Q. I should also like to show you Government's Exhibits No. 232, No. 231 and No. 233. I believe Exhibit No. 232 is the first of these in point of time, Mr. Carpenter.

It is a letter addressed to you, dated September 15, 1948, by Mr. Sloan.

He states, in the second paragraph, that:

"I have in mind two or three industrialists who would add prestige and bring experience into our Board of Directors. They are people who I am sure would be helpful in the years to come. In one case the individual is head of a corporation which is a supplier to General Motors to the extent of 20%; the other is Chairman of the Board representing a stockholder interest having very little to do with operations of a corporation which also has about 20% of General Motors business."

Then, passing down to the last paragraph on the page, he states:

[fol. 6647] "Now I realize that it would be better to have members on our Board having no relationship whatsoever with a corporation of a business character; at the same time, should we accept this as a definite rule? If we should say that an individual is not a candidate if he was connected with a corporation which was supplying us material to the extent of not to exceed 20% of our needs, should that be a barrier and prevent us from considering men in that position?"

Then he states, at the very last paragraph on page 2:

"What I am really asking, therefore, is:—Would you be prepared to accept as eligible for our Board of Directors, men whom you would be glad to have, from every point of view except that they might have relationships as a supplier to the extent of 20% of General Motors needs."

Then in Government Exhibit 231, a memorandum written to you by Mr. Lamot du Pont, dated September 16, 1948, the day after the previous document, you state:

"I would like to talk to you about this some time."

Then you state:

"I am wondering whether an objection to the inclusion of a director solely on the ground that he may be a supplier comes with good grace from us, in view of our own position."

"It is true that because of our stockholdings we are surely entitled to representation on the G. M. Board but in spite of this we cannot urge too strongly [fol. 6648] that a supplier is, irrespective of other merits, to be disqualified."

There are certain notations on that document, Mr. Carpenter. Are those in your handwriting or Mr. Lamot du Pont's handwriting, if you know?

A. They look like Lamot du Pont's handwriting.

Q. Calling your attention to the statement in the third paragraph of this memorandum which you wrote, beginning

with "It is true that because of our stockholdings we are surely entitled to representation on the G. M. Board, but in spite of this we cannot urge too strongly that a supplier is, irrespective of other merits, to be disqualified." Can you tell us what were your reasons for that statement?

A. Yes, I can. I think in this I was needling Lammot a little bit.

Lammot was very strong in the feeling that a man who is an important supplier of General Motors, perhaps, would not be the ideal director for General Motors. Personally, I didn't feel that way nearly as strongly as he did. As a matter of fact, I didn't think it was a serious deterrent at all, and if a man were a man of considerable capacity and in other ways well equipped to become a member of the Board, in our opinion, I didn't think that should serve as an obstacle.

As I say, Lammot didn't feel that way. It is a long time ago, but I think in that second paragraph there I was rather needling him because of the somewhat anomalous position which in a way it put ourselves.

I think I went on, however, with a perfectly obvious treatment of that. It is perfectly clear why we not only [fol. 6649-6724] were entitled to a position on the Board, but it was almost obligatory that we should be in there in order to look after our investments.

Q. Do you recall whether about this time you had a discussion of this subject matter with Mr. Lammot du Pont?

A. I think probably I did.

Q. Did Mr. Lammot du Pont ever take the position in his discussion with you that one of the objections might be that when you have a supplier representative on the GM Board, that he might be expected to attempt to influence General Motors to purchase from that supplier?

A. I don't believe I ever discussed with Lammot his reasons for that. I know I did not feel those same reasons.

Lammot was always very strong in the feeling that as to directors who were on the General Motors Board, there should be some reason to make us feel that they were specifically interested in the furtherance of the interests of General Motors, and I think that occasioned his comment regarding the stockholders.

Q. Was it your position that the fact that you were

representing a large stockholder overcame the objection that you were also a supplier?

A. Well, I certainly think that that was true. I would go even further than that. I would not think that being a supplier was necessarily a critical matter in disqualifying one.

Q. I take it that view was not shared with you by Lam-mot du Pont?

A. It was not.

Mr. Harsha: Thank you. I think that is all.

Mr. Cox: No redirect examination, your Honor.

[fol. 6725] CRAWFORD H. GREENEWALT, called as a witness on behalf of the defendants, having been first duly sworn, was examined and testified as follows:

Direct examination

By Mr. Cox:

Q. You are Crawford H. Greenewalt?

A. I am.

Q. You live in Wilmington, Delaware?

A. I do.

Q. You are now the president of the du Pont Company?

A. I am.

Q. How long have you been president of the du Pont Company?

A. Since January 19, 1948.

Q. Where were you educated, Mr. Greenewalt?

A. I attended the William Penn Charter School in Philadelphia, from which I graduated in 1918, and the Massachusetts Institute of Technology, from which I graduated in 1922.

Q. Did you receive a degree at that time?

A. I did.

Q. What degree was that?

A. Bachelor of Science.

Q. I believe that since that time you have been the recipient of some honorary degrees from universities, is that right?

A. That is correct.

Q. And you are a member of the National Academy of Sciences?

A. I am.

Q. Mr. Greenewalt, are you the Crawford Hallock Greenewalt who is named as a defendant in Paragraph 9 of the first Amended Complaint in this case?

A. I am.

Q. The record shows that on the government's motion you were dismissed as a defendant.

[fol. 6726] Are you the husband of the Margareta du Pont Greenewalt who was named as a beneficiary defendant in Paragraph 11 of the second Amended Complaint?

A. I am.

Q. That is the complaint which is now before the Court. In what relationship, if any, does Margareta du Pont Greenewalt stand to the defendant, Irene du Pont?

A. She is his daughter.

Q. When were you married, Mr. Greenewalt?

A. June 4, 1926.

Mr. Cox: At this time, may it please the Court, I should like to offer in evidence the document which has been marked du Pont Exhibit No. 465 for identification, which is a tabulation of the positions held by Mr. Greenewalt with the du Pont Company from 1922 to date.

(Said document, so offered and received in evidence, was marked Defendants' Exhibit No. DP-465.)

By Mr. Cox:

Q. Mr. Greenewalt, do you have a copy of this?

A. Yes, I have one here.

Q. I do not intend to ask you many questions about the positions that are listed in this exhibit, but there are two or three questions that I think might assist the Court and counsel.

I notice that you began as a control chemist in the Paint, Lacquer, and Heavy Chemical Department, and that after being in that department for a short time, you then became a control chemist in the Chemical Department.

[fol. 6727] Is the Chemical Department an operating department of du Pont?

A. No, it is not. It is one of the company staff departments. Its responsibility is really for the forward looking research that is aimed at developing new processes and new products for the long term future.

Q. Does it carry on any commercial operations, any buying or selling, or anything of that kind?

A. No, it does not.

Q. This exhibit shows that after having been in the Chemical Department as control chemist, you served in the Chemical Department in something that is called the experimental station.

Will you tell us what the experimental station is?

A. Well, that is a site about two and a half miles outside of Wilmington where all of the research done by the Chemical Department is conducted, but where also some of the operating departments have their research laboratories.

The Chemical Department has a dual responsibility in the sense that it is responsible for its own research program, and also acts as landlord for the other departments that are resident there.

Q. How large an establishment is that?

A. Well, size can be measured in many different ways. The investment there is about \$45,000,000. There are total personnel of about 2,500, and the technically trained people engaged in research number about 900. That is at the present time.

Q. Was the establishment that large when you went to work there in 1924?

A. By no means.

Q. Mr. Greenewalt, without going into any detail, can [fol. 6728] you just refer generally to one or two of the projects that were carried on with which you were connected while you were at the experimental station so that we may have in the record an illustration of the kind of work that was done there?

A. Well, I remember very well the first job I had was to assist in the construction of a high pressure laboratory in which we were to explore the carrying out of reactions under pressures of from 5,000 to 15,000 pounds a square inch. That was considered rather remarkable in those days.

I also did some work on the synthesis of ethylene and acetylene from petroleum hydrocarbons, and then for the few years before I became assistant director, I was engaged in the development of nylon.

Q. The exhibit shows that after having been in the Experimental Station still in the Chemical Department, you thereafter were engaged in the Chemical Division of the Grasselli Chemical Department.

Is the Grasselli Chemical Department an operating department?

A. Yes, it is. It is one of our ten industrial departments.

Q. It carries on commercial operations?

A. Commercial operations, it does.

Q. Was your work in that division related to those commercial operations or was it still a research job.

A. Well, each of our industrial departments is responsible for the three important branches of its business, sales, production and research. Each industrial department, of which Grasselli was one, had its own research division, and I was at the head of the research division of the Grasselli Chemical Department.

Q. This exhibit shows that the next position you held was manager, Technical Division, Explosives Department. [fol. 6729]. Can you explain to us what your duties were in that position?

A. Well, that was the code under which our atomic energy work was done in the Second World War. To explain what I did, I am afraid I must give a little background.

The du Pont Company had undertaken to design, operate and build a plant, which later became known as the Hanford Engineer Works, in which we manufactured plutonium, which, as I suppose everybody knows, is one of the fissionable materials.

Now at the time that we undertook that work, we in du Pont had no knowledge whatever of the scientific background that was involved in that undertaking. That, as you may recall, was being carried out here at the University of Chicago under the name of the Metallurgical Project, and under the direction of Mr. Arthur Compton, who at that time, I think, was professor of physics here.

Now, the Metallurgical Laboratory took the responsibility for the scientific background for this atomic energy development fully and completely. We could not do so. However, the men here, while very distinguished scientifically, had very little knowledge of operating procedures or of what was necessary to convert scientific concepts into something that would work, and so there was set up in the du Pont Company a technical group whose function was that of liaison.

I was in charge of that group and that is what this title implies. Our job really was to understand the scientists here, what they were doing, and to translate their results in terms that our own engineers, our designers, constructors and operators could use in implementing their responsibility in the construction of this plant, and of course, it went [fol. 6730] two ways. When some piece of information was needed by our own people, it was our job to translate that into scientific language so that it would be at hand.

Q. That work, the exhibit shows, continued until 1945?

A. So far as I was concerned, Mr. Cox. The company's connection continued for perhaps a year and a half longer.

Q. And thereafter you held various positions in the du Pont Company, including a position in the Development Department and one in the Pigments Department, and then, the exhibit shows, that you became a vice president on June 1, 1946, and president on January 19, 1948.

The exhibit also shows that on January 19, 1948, you also became a member of the Finance Committee?

A. That is all correct.

Q. You had theretofore, according to the exhibit, served on the Executive Committee, that is, from June 1, 1946. Does that accord with your recollection?

A. That is so.

Q. Have you ever been on the Board of Directors of General Motors?

A. I have not.

Q. Now, it appears from this exhibit and what you have told us in the brief testimony you have given about your positions, Mr. Greenewalt, that many of the positions you held in the du Pont Company, particularly in the early

stages of your experience with the company, were positions in which your duties were primarily of a scientific or research nature.

Can you tell us when or at what point or how you began to become acquainted with the commercial operations of the du Pont Company?

A. Well, Mr. Cox, it is very difficult to answer your question in terms of a date. I don't think it went quite that way. [fol. 6731] I had a predilection for research, but I think the fact that I went into industrial research was an indication that I was interested in the commercial side. Then of course, very shortly afterwards, I became a rather substantial stockholder, and in that sense I felt it was my responsibility to know as much as was proper about the commercial side of the company.

Of course, even in the research laboratory, one has to become aware of the commercial implications of what one is doing.

For example, we were thoroughly aware in the Nylon development of the necessity of competing with silk, and that required a knowledge of the commercial factors that entered into a successful research development.

I suppose that one might say that the first direct connection I had with the company's commercial activities was when I became the head of the Chemical Division of the Grasselli Chemical Department, and as you will see about the same time I became a member of the Board of the du Pont Company, and of course then it was necessary for me to become more deeply familiar with the company's commercial interests.

I should say it was a matter of growth rather than of date.

Q. Would it be correct to say that as the years went on you did become more and more familiar with the company's operations?

A. Yes, that was necessary, Mr. Cox.

Q. Mr. Greenewalt, can you tell us generally, and without too much detail, if you please, how the du Pont Company was organized and how it operates, with particular reference to the relation between the operating departments and the committees of the Board of Directors, and the [fol. 6732] Board itself.

A. Well, there again, I have to give a small amount of background.

In 1921, I have been told, and particularly at the urging of Mr. Irene du Pont, the decentralized system of organization was set up under which we still operate. The idea there was that if the company were going to grow and expand and diversify the chemical field, some way had to be found to share the responsibility so it would not be necessary for the very top echelons of management to run every phase of the business.

To that end there were set up what we call our industrial departments. At that time, I believe, there were four; today there are ten.

Those industrial departments carry forward the business of the company. They make the products, sell them, and do a substantial amount of the research necessary to support them and diversify their own operations.

Each of those industrial departments is headed by a general manager. That general manager has substantially the autonomy of the president of a subsidiary company, or of an independent company. For example, he has complete authority with respect to the purchase of his raw materials; with respect to his sales problems, including the setting of his selling prices; with respect to the wage and salary rates that he pays his organization; with respect to the selection of his personnel.

In fact, the only personnel selections with which the Executive Committee is concerned, is the designation of the general manager himself, and the approval of his assistant.

[fol. 6733] Now, in all of those regards he has as much autonomy as can be given him.

Now, there are, in addition, I think, fourteen staff departments—legal, treasurer's, and so forth, public relations, advertising, and what-not—who serve the industrial departments. But their position essentially is the position of an independent expert selling his wares to the industrial departments general managers.

Now, the Executive Committee is the governing body of the du Pont Company with respect to its business and

operations, and the Executive Committee, of course, has broad jurisdiction over the company's operations.

It is, as you have been told, a committee of the Board of Directors. It decides on all matters of broad policy that cut across the industrial departments of the company. It approves appropriation requests above a rather small amount.

There are many other duties which I won't bother to go into. I suppose one might say that the most important function of the Executive Committee is the selection of the top personnel of the company, because, of course, on that the successful operation of the industrial departments depends.

Q. Now, Mr. Greenewalt, I should like to direct your attention to the subject of the commercial relations that exist and have existed between du Pont and General Motors.

Are you aware that General Motors has been and is a substantial customer of the du Pont Company?

A. Yes, I am.

[fol. 6734] Q. Mr. Greenewalt, as long as you have been a member of the Finance Committee of the du Pont Company, has it received any reports of any kind from any source showing the amount of sales made by du Pont to General Motors?

A. It has not.

Q. Has it received during that period of time, any reports showing what percentage or part of General Motors requirements it buys from du Pont?

A. No, it has not.

Q. Now, directing your attention to the Executive Committee on which you have already testified, has that committee received any reports during the period of time that you have been a member, showing the percentage of General Motors' requirements which that corporation buys from the du Pont Company?

A. No, it has certainly not received any reports that set that forth.

I might say this, that we have received, from time to time,

monthly reports from each of the industrial departments. In those reports, sales are reported, earnings are reported, and frequently there is commercial chit-chat relating to reasons for the department missing its forecast or exceeding it, as the case may be.

Now, there may be occasional references in those reports; there may well have been occasional references in those report to dealings with General Motors, but there is certainly no routine in which the Executive Committee or Finance Committee or any other committee, would be aware of the percentage of its requirements that General Motors purchases from the du Pont Company.

Q. Now, personally, quite apart from your membership on these committees, Mr. Greenewalt, does the president [fol. 6735] receive any reports from any source that show what percentage of its requirements General Motors is buying from du Pont?

A. I do not.

Q. To your knowledge is any system of reports kept anywhere in the du Pont Company which regularly and systematically record the percentage of General Motors' requirements it buys from du Pont?

A. There is not.

Q. Do you ever receive any information of that kind personally, direct from General Motors, as distinguished from receiving it from someone in the du Pont Company?

A. No, I have never received such a report.

Q. Have you ever intervened with anyone in General Motors to ask them to assist the du Pont Company in selling its products to General Motors?

A. No, I have not.

Q. Mr. Greenewalt, have you ever heard of the commercial practice that is sometimes described as "reciprocity"?

A. Yes.

Q. Have you, as president of the du Pont Company, ever requested any information from the president of General Motors or from anyone else in General Motors, about

General Motors' suppliers, so that you could use that information to sell du Pont goods?

A. No, I have not.

Q. Are you aware that in 1924 the general or central purchasing committee of General Motors passed a resolution or reached a decision which in effect recited that if the president of du Pont should apply to the president of General Motors, such information might be made available to du Pont?

A. I am now aware of it.

Q. When did you first learn of that?

A. I can't remember the date. It was certainly in connection with this litigation. That was the first time.

[fol. 6736] Q. Were you told about that resolution when you first became president of the du Pont Company?

A. No, I was not.

Q. Now, I should like to direct your attention, if you please, to the subject of commercial relations that exist between du Pont and the United States Rubber Company.

Are you aware that du Pont buys goods from the United States Rubber Company?

A. I am.

Q. And are you aware that du Pont sells goods to the United States Rubber?

A. I am.

Q. While you have been on the Finance Committee or the Executive Committee of the du Pont Company, has either of those committees received reports showing the percentage of United States Rubber requirements that it buys from the du Pont Company?

A. They have not.

Q. Do you, as president, personally receive any such reports?

A. I do not.

Q. Have you, as president, received any reports that compare du Pont's purchases from United States Rubber with du Pont's sales to United States Rubber?

A. No, I have received no such reports.

Q. Have such reports to your knowledge been received by the Finance or Executive Committees while you have been on the committee?

A. No. I should say this, Mr. Cox: I think that when this litigation was first instituted in connection with some of the accusations that were made, I felt it necessary to advise the stockholders that this litigation was in progress and to give them a point of view—our point of view, shall I say quickly—with respect to it.

[fol. 6737] In that connection I did ask to be compiled our sales to the United States Rubber Company for a particular year, and our sales to the General Motors for a particular year. I did ask to have that information prepared in connection with that letter to the stockholders, but that is the only occasion on which I have ever had such information available to me.

Q. My question, Mr. Greenewalt, was not directed at anything you may have done in preparation for this litigation, but to your ordinary course of business.

A. No, in the ordinary course of business there was nothing of that sort.

Q. Now, while you have been president of the du Pont Company have you seen Mr. Ireneé du Pont from time to time?

A. Oh, yes.

Q. Have you seen Mr. Lammot du Pont from time to time, when he was alive?

A. I did, indeed.

Q. And have you seen Mr. P. S. du Pont from time to time?

A. Yes.

Q. Have you ever discussed in any way the affairs of the du Pont Company with any of those gentlemen?

A. Yes, I have.

Q. Now, did Mr. Ireneé du Pont ever ask you to cause the du Pont Company to buy its requirements of goods from the United States Rubber Company?

A. No, he did not.

Q. Did any of the men that I have named ever make such a request to you?

A. No, they did not.

Q. Did any of those men ever say anything to you about any agreement existing between du Pont and United States Rubber whereby each agreed to buy its requirements [fol. 6738] of goods from the other, or any part of their requirements?

A. No, they did not.

Q. Did any of those men ever say anything to you in any of these conversations about any such agreement between du Pont and General Motors?

A. They did not.

I think I might say, Mr. Cox, that the three brothers, and Mr. Carpenter, would lean over backwards—as a matter of fact, I don't remember an occasion since I have been president, when they have come to me with any suggestion whatever with respect to the du Pont Company.

The conversations that I had with respect to the du Pont Company's affairs were always of my seeking.

Q. These men have all been members of the Finance Committee while you have been a member of this Finance Committee?

A. No, they have not.

Q. They have not?

A. Only Mr. Pierre du Pont has been a member of the Finance Committee while I have been a member of that committee.

Q. Now, I should like to direct your attention to certain other corporations which are involved in this case, Mr. Greenewalt, and one of them is Christiana.

You have been a director of that corporation since 1944?

A. I have.

Q. And I think the record in this case, specifically Government's Exhibit No. 1292, shows that in 1936 Mr. Irene du Pont gave you 1,000 shares of stock in that corporation, is that correct?

A. That is correct.

Q. Has that 1,000 shares been your total holding in Christiana at any one time?

A. That has been my maximum holding at any one time, yes, Mr. Cox.

[fol. 6739] Q. When you received this gift from Mr. Ireneé du Pont, was any restriction made on the gift, Mr. Greenewalt?

A. Yes, there was. The restriction was that I was to continue in the employ of the du Pont Company for a period of five years. Should I voluntarily leave the employ of the du Pont Company, I had to return the stock to him. I could, however, retain such dividends as had been paid in the interim. That is the only qualification. I think there is a letter to that effect.

Q. I was going to ask you whether it was stated in writing or orally?

A. Yes, it was. It was stated in writing.

Q. Do you have with you a copy of that letter?

A. Yes, I have it here.

Q. That is marked Defendants' Trial Exhibit No. DP-331 for identification, a letter to you from Mr. Ireneé du Pont, dated June 1, 1926. That is the letter to which you refer?

A. That is it, yes.

Mr. Cox: I now offer that letter in evidence.

(Said document, so offered and received in evidence, was marked Defendants' Exhibit No. DP-331.)

Mr. Cox: I think perhaps I might comment that the substance of this letter, I think, has been the subject of the stipulation that was made between Miss Hunt and Mr. Nichols, earlier in this proceeding.

Mr. Harsha: That's right.

By Mr. Cox:

Q. Mr. Greenewalt, are you a party to any agreement [fol. 6740] or understanding, express or implied, that restricts your right to dispose of your shares of Christiana?

A. No, I am a party to no such agreement, nor do I feel I am restricted in any way.

Q. Have you, in fact, disposed of any of the shares of stock that you owned in Christiana?

A. I have.

Q. In what way have you disposed of it?

A. Well, the major portion, in trust for my children, and other rather substantial amounts as gifts to various charities.

Q. In relation to the gifts to charities, have those gifts been absolute, or have you retained any power to vote the stock?

A. No, they have been absolute.

Q. As to the Christiana stock which you now hold and which you have held in the past, have you been a party to any agreement or understanding with anyone which restricted your right to vote that stock as you saw fit?

A. I have not.

Q. Have you ever been a stockholder or officer or director of the Delaware Realty & Investment Company?

A. No, I have not been.

Q. Have you ever been a stockholder, officer or director of the Wilmington Trust Company?

A. No.

Q. Have you ever been a director or officer of the United States Rubber Company?

A. No.

Q. Have you ever owned any shares of stock in the United States Rubber Company, Mr. Greenewalt?

A. Yes. At one time I owned 300 shares of the preferred stock of the United States Rubber Company, but since that time that has been disposed of in large part as gifts to charity, and I think there was some small portion of it that I sold. I am not now a stockholder.

[fol. 6741] Q. Mr. Greenewalt, the amended Complaint in this case charges that over a long period of years, including its later stages, years in which you have been an officer or director of du Pont Company, that a conspiracy existed between the du Pont Company and General Motors and U. S. Rubber Company, the substantial terms of which are that each of the companies would favor the products of the other, so far as buying for its own requirements are

concerned, and that the companies would divide fields of industrial activities.

I shall now ask you some questions about those charges in the Complaint which I should like to have you consider carefully in answering them.

The first question is this: During the period of time that you have been a director and officer of the du Pont Company, to your knowledge has there been any agreement or understanding or arrangement, express or implied, between du Pont and General Motors, under which General Motors was obligated to buy all or substantially all, or some stated percentage of its requirements of the goods it uses, from du Pont?

A. There has not.

Q. During that same period of time has there been any such arrangement or agreement or understanding requiring the du Pont Company to buy from General Motors, du Pont's requirements of goods made by General Motors?

A. There has not.

Q. Has there, during that period of time, to your knowledge been any agreement or understanding or arrangement, express or implied, that General Motors would stay out of the chemical business?

A. There has not, to my knowledge.

[fol. 6742] Q. Has there been any such arrangement, agreement or understanding, that General Motors would turn over to du Pont for exploitation, any chemical discoveries or inventions that General Motors might make?

A. There has not.

Q. During that same period, to your knowledge, Mr. Greenewalt, has there been any such agreement, understanding or arrangement between the United States Rubber Company and du Pont, whereby United States Rubber was required to buy all or substantially all, or any stated percentage, of its requirements from du Pont?

A. No.

Q. Was there any such agreement or arrangement, to your knowledge, between du Pont and the United States Rubber, which obligated du Pont to buy all or any part of its requirements from United States Rubber?

A. No.

Q. Has there been any agreement or arrangement under which United States Rubber refrained from entering into the chemical business or into chemical fields of activity in competition with du Pont?

A. There has not.

Mr. Cox: That is all.

You may cross examine.

Mr. Harris: If your Honor please, I wonder if I might have five minutes? Oh, that is all right. It is here now.

Cross Examination

By Mr. Harris:

Q. Mr. Greenewalt, I would first like to call your attention to the time when you became president of the du Pont Company.

Now, what are your duties as such president?

A. Well, I am the chief executive officer of the du Pont Company.

[fol. 6743] Q. What does that mean?

A. That means, I suppose, that as the highest responsible echelon in the company, I am Chairman of the Executive Committee, and I am the instrument, I suppose it would be fair to say, through which the instructions of the Executive Committee and the Finance Committee are carried out with respect to the operating departments, when some decision of major policy is reached.

Q. Now, do you have the power of appointment of your principal officers, such as the managers of divisions?

A. Now, I think we should be very precise there, Mr. Harris.

Q. Yes, sir?

A. The appointments of the general managers of the industrial departments and the heads of the auxiliary departments are made by the Executive Committee. It is normally my function to make recommendations to the Executive Committee as to who shall be appointed general managers or department heads, as the case may be.

Q. Yes?

A. The assistant department head or assistant general manager is nominated by the general manager, and his selection is approved by the Executive Committee, there being a very real distinction.

Q. Now, in the case of the manager, have you had occasion since your incumbency in the office, which was in 1948, wasn't it, in the beginning?

A. Yes.

Q. Have you had occasion to make any changes in the managers of any of your departments?

A. Yes, I have.

Q. Particularly what departments?

A. Well, I remember several. The Organic Chemicals Department, the general manager of that department who was general manager at the time I became president, retired [fol. 6744] some months or years afterwards, and I recommended his successor, Mr. Daley, who I think appeared here in this court.

Q. You are the one who put Mr. Daley's name before the Executive Committee?

A. That is correct.

Q. Now, after it has been before the Executive Committee and approved, as I take it it was, does the appointment then go to the Board?

A. No, it does not.

Q. It stops there?

A. It goes to the Board as a matter of information.

Q. But not for approval?

A. But the power is entirely in the Executive Committee.

Q. Now, as to these assistant managers, does the recommendation of the manager come to you for approval?

A. You said Manager, Mr. Harris?

Q. I am speaking of the assistant managers.

A. I see. Yes, it does come to the Executive Committee for approval.

It works this way: let's take the case of Mr. Daley, who was appointed by the Executive Committee as general manager of the Organic Chemicals Department. He will then consider his recommendation for his assistant, and he will

bring that to the Executive Committee and say, "I recommend Mr. So-and-So as my assistant."

Now, if the Executive Committee approves, it says, "Yes, we approve that recommendation." If it doesn't approve, it merely expresses its disapproval, whereupon Mr. Daley retires into the silences and comes up with a new candidate.

Q. Comes up with a new one?

A. Yes, but he always makes the recommendation.

Q. Now, how do the Executive Committee become members? What is the procedure there?

A. That, of course, is a Board appointment, but there it [fol. 6745] is again on my recommendation. We have had one new member since my term as president, and that was a recommendation I made to the Board.

Of course, after consultation with my associates on the Executive Committee.

Q. So that I may have my record straight on that, who was that, Mr. Greenewalt?

A. Mr. Dannenbaum.

Q. That is the Executive Committee?

A. Yes.

Q. Oh, I have him listed here.

A. You have him there. It is my impression that he was elected early in 1949; I am not sure.

Q. We have him down as 1948, but that is all right.

A. You are doubtless right.

Q. Now, as to the Finance Committee, is the same procedure adopted?

A. Well, I have nothing to do with recommendations for membership on the Finance Committee except as a Board member, if I wish to make some point with respect to it. I think that the recommendations for membership on the Finance Committee would lie between the Chairman of the Finance Committee and the Chairman of the Board.

Q. Is that somewhat unusual, Mr. Greenewalt?

A. I think not. Unusual in what sense, Mr. Harris? I want to be sure I understand.

Q. Was it peculiar to the du Pont Company, if you know?

A. Oh, I am not sure as to that. I think many companies have Finance Committees, but I am sure I couldn't say as to how committee appointments are made in other companies. I wouldn't be able to say whether it was unique or not.

[fol. 6746] Q. But it is, however; in the case of the Finance Committee, that is the only case, bearing in mind other committees, that the Board acts on rather than the president through some other means? You have the Chairman of the Board, don't you?

A. Yes.

Q. And does he put the nomination before the existing Finance Committee for a member?

A. No, the Finance Committee and the Executive Committee are committees of the Board of Directors. They are elected by the Board.

Q. I am only getting nominations now, sir.

A. Now in the du Pont Company, as it has been traditionally run, the Executive Committee job is a career job in the sense that the members of the Executive Committee have uniformly spent their life and their career in the du Pont Company and have come up through various branches of its business.

Q. They are employees, aren't they?

A. Yes, strictly speaking, I am advised by our legal people that the Finance Committee members are also employees, and so is the Chairman of the Board.

Q. We are not discussing that. Let's get your ideas on it, Mr. Greenewalt.

A. Literally they are all employees. But as constituted, all of the members of the Executive Committee are men who have spent their life in the du Pont Company.

In the Finance Committee, those elected to the Finance Committee have been usually men of either long financial knowledge and experience, or men who represented substantial stock ownership in the du Pont Company.

The recommendations—as a matter of fact, the membership of the Finance Committee has not changed sub-

[fols. 6747-6754] stantially over the years in which I have been a director, so that the occasion for nominating new members has not come up very frequently. But I think the responsibility for nomination would, as I say, go between the Chairman of the Board and the Financial Vice President who is Chairman of the Finance Committee.

But I think that is quite ordinary, really, and the Board approves in every instance.

Q. That is the Board of Directors?

A. Yes, indeed.

[fol. 6755] Q. What would you say is the function of the nominees of the du Pont Company on the Board of General Motors, as nominees of the du Pont Company?

A. Well, I would say that their responsibility is to conduct themselves as a director of the corporation in the interest of all of the stockholders.

Q. Undoubtedly. But is there any reason why through the years there should always have been five, possibly on occasions six, nominees of the du Pont Company on the General Motors Board?

A. Well, I don't think there is any particular reason. Obviously some representation is indicated by the very substantial stock ownership of the du Pont Company.

[fols. 6756-6760] Q. That is because of the ten million shares held by the du Pont Company in General Motors, they are entitled, would you say, to that representation?

A. Well, now, I am quite willing to speak in generalities, Mr. Harris, but when you come to tell me whether that results in four, five or six as being appropriate, I must hold up my hands and say I don't know.

Q. May I put this question to you: Would you say that any part of their function is to represent the du Pont Company on the Board of General Motors?

A. No, I would say not, Mr. Harris.

Q. The only function you feel they have, do you, is to represent all the stockholders?

A. Yes, indeed.

[fols. 6761]. Q. What did it do, if he told you, to the young man?

A. Well, his idea, I think, was that the young man would have a greater incentive to progress in the company and to seek its prosperity because if he were successful, the prosperity of the company and his own prosperity would go together. That, of course, is the heart of our bonus plan, in any event.

Q. Now the prosperity of the company is in some measure dependent, is it not, upon the management?

A. Oh, I would say completely, Mr. Harris, almost. With good management you have a good company; otherwise you don't.

Q. Would this incentive, you think, make for loyalty to the company and to the management?

A. I am not sure that I get you. It would certainly mean that the interests of the management and the interests of the stockholders would become coincident in the sense that the manager would be thinking not as a hired hand, hired to do a job, not only in that capacity, but also as an owner or part owner of the business.

Now that would result in his actions being dictated not only in consideration of the salary he was paid, but in consideration of the future prosperity that he might expect through an appreciation either in value or in dividend payment of the stock that he held.

Q. Has it followed in your experience that the recipients of these bonuses have been cooperative with the management?

A. You continue to speak about cooperation with the management. Of course, all employees must cooperate [fol. 6762] with the management. You obviously cannot run a business in which the people responsible for handling it are at cross purposes. That is the essence of any successful business, to have cooperation among its participants.

Q. I would say it was basic. What we are concerned with is why the bonus?

A. Well, for the reason, Mr. Harris, that if one has a participation in the business, in the earnings of the busi-

ness through stock holdings therein, one conducts his daily affairs both from the point of view of his position as a paid employee and from his position as a stockholder in the business. The two points of view should be coincident always. They are not necessarily so. The possession of a substantial stock interest in the business makes it so or tends to make it so.

Q. Did you notice that change—have you noticed that change in your employees when they became stockholders, that there was some difference in their attitude towards the management?

A. Mr. Harris, you keep talking about attitudes towards the management. Attitudes to their work is a more accurate way of putting it.

There is a difference in the attitude of an employee if he is a paid employee only, and if he is also a stockholder. It is not a question of his attitude to his associates. It is a question of the kind of effort he will make in the interest of the business, and when he makes an effort in the interest of business, if he is a stockholder, it is an effort in his own interest, and that is important.

It is not a question of the relationship of one man with another man.

Q. Did you find that as a result of this bonus plan your [fol. 6763] employees and executives stay with the company?

A. Yes, indeed.

Mr. Harris: Thank you, Mr. Greenewalt.

The Court: Any questions on redirect?

Mr. Cox: No redirect, your Honor.

The Court: You are excused.

(Witness excused.)

Mr. Gribbon: If the Court please, we have two additional exhibits we would like to introduce at this time. I will ask Mr. Wescott to pass them up to the Court.

These exhibits—I might add we were a little late in serving on Government, and they have asked that their opportunity to object to them be reserved until their rebuttal.

The Court: They will be received subject to objection later after inspection.

Mr. Harsha: Thank you, your Honor.

Mr. Gribbon: These exhibits are identified as du Pont exhibits 329 and 330, and deal with that portion of the proof that relates to General Motors' purchase of cellulose acetate molding powder. That is the plastic which the Inland Manufacturing Division of General Motors used in the fabrication of steering wheels.

The witness Gillie testified on behalf of du Pont that du Pont began to sell such powder in 1937, and had some initial success, and thereafter lost out to competitors, the principal, among which, is the Tennessee-Eastman Company. [fols. 6764-6765] Exhibit DP-329 is a request which the general counsel of the du Pont Company directed to the Eastman Kodak Company, a parent of Tennessee-Eastman asking for a statement of the sales which Tennessee-Eastman made of cellulose acetate molding powder during the four years, 1937 through 1941.

Exhibit DP-330 is the reply to that request by the du Pont general counsel signed by one M. K. Robinson of the Eastman Company which states, on the first page, the exact poundage that Tennessee-Eastman sold to Inland during the period 1937 through 1941, and on the second page estimates the total dollar volume of such sales based upon average prices during the years, and these two exhibits, DP-329 and DP-330, which I now offer in evidence, should be read in conjunction with Exhibit DP-400 which is already in evidence and which shows the du Pont sales of cellulose acetate molding powder to Inland during the years 1937 through 1941.

(Said documents, so offered and received in evidence, were marked Defendants' Exhibits Nos. DP-329 and DP-330.)

[fol. 6766] CHARLES ERWIN WILSON, called as a witness on behalf of the Defendants, having been first duly sworn, was examined and testified as follows:

Direct examination

By Mr. Hurd:

Q: Mr. Wilson, give us your full name, please.

A. Charles Erwin Wilson.

Q. Where do you live?

A. My home is at Bloomfield, Michigan. Temporarily I live in Washington.

The Court: Would you keep your voice up, Mr. Wilson? The acoustics are bad. The amplifier is not working.

[fol. 6767] By the Witness:

A. I will repeat what I said.

My full name is Charles Erwin Wilson and my home is in Bloomfield, Michigan.

By Mr. Hurd:

Q. Mr. Wilson, you were employed by General Motors Corporation at one time?

A. Yes, sir.

Q. What was the date of your first employment?

A. In April, 1919.

Q. But prior to that time had you had any employment by any other concern?

A. Yes.

Q. What was that, and during what period?

A. Westinghouse Electric Manufacturing Company from July, 1909, until April, 1919, almost ten years.

Q. When you went with General Motors in 1919 what position did you have?

A. I was employed as chief engineer and sales manager of the Automotive Division of the Remy Electric Company at Anderson, Indiana. They had a branch office in Detroit also.

Q. What was the business of that company, of Remy Electric?

A. The Remy Electric Company made starting, lighting

and ignition equipment for motor cars, trucks and tractors.

Q. How long did you remain with Remy?

A. The Remy Electric Company in 1925 was combined with the Delco Company and thereafter the company was called Delco-Remy Company, and I remained with the Delco-Remy Company until late in 1928.

Q. What position did you have with Delco-Remy before you left it in 1928?

A. I was president and general manager of it.

[fol. 6768] Q. That was a separate organization?

A. That is correct. It was a wholly owned subsidiary of General Motors Corporation.

Q. When you left the Delco-Remy in 1928, at the end of 1928, where did you go?

A. To Detroit, Michigan, with headquarters in the General Motors Building.

Q. And that is still with the General Motors Corporation?

A. Yes.

Q. Is that what is referred to as the central office?

A. That is right, the operating end of the business.

Q. What position did you have at the time of your transfer to the central office?

A. Temporarily I was special assistant to Mr. Sloan, who was then president, pending a change in the organization. Later I was vice-president in charge of the manufacturing staff.

Q. When did you become president of General Motors Corporation?

A. In January, 1941.

Q. Then how long did you remain president?

A. Until January of this year; twelve years.

Q. 1953?

A. Yes.

Q. What was the occasion of your leaving General Motors at that time?

A. I left to become Secretary of Defense.

Q. Have you had any connection or relationship with General Motors since that time?

A. No.

Mr. Hurd: If the Court please, I offer in evidence a document marked for identification as General Motors Ex-

hibit 285, which is marked in pencil at the lower right-hand corner as No. 1 in the Court's book.

(Said document, so offered and received in evidence, [fol. 6769] was marked Defendant General Motors' Exhibit No. 285.)

Mr. Hurd: This is a summary from the employment records of General Motors showing the various positions that Mr. Wilson occupied with General Motors Corporation from 1919 to January, 1953.

By Mr. Hurd:

Q. Mr. Wilson, now turning to the 1929 period when you were transferred to the central office of General Motors Corporation, and covering that date until the time you became president in 1941, will you describe in general terms the nature of your duties?

A. They are in the broad manufacturing end of the business, as distinguished from sales and engineering. They had to do with properties and facilities, the coordination of the manufacturing knowledge, development of purchasing and manufacturing policies.

I was in charge of any central purchasing that the corporation might do, as distinguished from the bigger activity of purchasing that each of the divisions did for themselves. I investigated any properties that the corporation might be interested in buying, anything we thought we ought to sell. I reviewed the appropriations requests for Mr. Sloan on appropriations of new money for new machinery and equipment and expansions, for replacement of obsolete equipment.

A final review before such request went to the Executive Committee of General Motors, and the Finance Committee, for final approval. In a sense, I was a technical assistant in that area for Mr. Sloan.

Q. Did you have anything to do with the Accessory Divisions of General Motors during this period?

[fol. 6770] A. Not until a little later. At that time I had the same relation with all of the divisions. I was an over-all assistant to Mr. Sloan on all of the company's manufacturing—

Q. You are referring to 1929?

A. That's right.

Q. And what do you mean by "a little later" you had some connection with the Accessory Divisions?

A. Well, a little later Mr. John Pratt, who was vice-president in charge of the Accessory Divisions, and I had a dual job. I was his assistant on the accessories end of the business, and I still had my position as vice-president in charge of the manufacturing staff.

Q. And did you later subsequently take over the entire responsibility for the Accessory Divisions?

A. Yes, at one time.

Q. And that was before you became president?

A. That's right, before I became executive vice-president also.

Q. Now, you have referred to having a responsibility for looking into the acquisition or disposal of businesses.

Will you go into that in a little more detail, and tell us what you mean?

A. Well, I might mention a few. After investigation we purchased, and I worked out the purchasing arrangements, the Allison Engineering Company in Indianapolis. That was a small concern that started out—Jim Allison had gotten interested in racing engines at the Speedway, developing special engines with increased power.

Later they started a little business of overhauling the Liberty engines, the aircraft engines that were made in World War I. They had developed a special improved type of bearing for aircraft engines. It was not a very large [fol. 6771] enterprise, but it seemed to us a proper entry into the aircraft engine field. That was one of the acquisitions.

Q. What did you do in connection with that matter?

A. I handled the negotiations to purchase it from the estate of the people that had been owners. The Whitman Engine Company in Cleveland was another.

Another was the McKinnon Industries in Canada where General Motors wanted to expand and promote its tire and

truck business in Canada. We felt that we needed the backing of a good parts manufacturing organization.

The Fokker Aircraft Company was one.

Q. What company?

A. Fokker Aircraft Company had been built up around the engineering and inventive genius of Tony Fokker, and was an American company with rights to produce planes. It had certain other interests, such as Western Air.

It was a company that was promoting aviation generally in the United States. The aviation business being rather closely associated in some ways with the motor car business, some of the principles and engineering details were similar, and there were some possibilities in our research and in our experience in mass production that we could contribute to a new, growing industry.

Also, it was just far enough away from our regular business that we thought once in a while we might get an idea that would be helpful in our broader business.

Q. Did you acquire that company?

A. That is right.

Q. Who handled the investigation of the business?

A. Well, I did myself. I visited around and looked the properties over and considered what the assets were.

[fol. 6772] Q. Were there any other companies that you investigated during 1929 and the early '30's?

A. There were a couple of small companies. Packard Electric Company down in Warren, Ohio, which made wire.

Q. Did you acquire that?

A. Yes, sir, and Sunlight Company that made some fractional horsepower motors. That was a little later.

Q. Did you have anything to do with the Bendix Aviation acquisition?

A. Yes. I helped to organize the Bendix Aviation Company. As a matter of fact, I personally named it. I suggested to the other new directors that that would be a good name for it. I have known Mr. Bendix since the very early days of the automotive business, back in, oh, 1909 or 1910, perhaps 1911—1911 and 1912. He was quite an inventor and promoter.

He was a great believer in the automotive business, and later in the aircraft business. The basic idea of Bendix Aviation was to put together some smaller concerns that would be strong enough to really make progress, not only in the automotive business but in the new and growing aircraft industry.

Q. Did you investigate any businesses that you did not acquire or that you did not go into?

A. Yes. We investigated the possibility of going into the steel business. There was one particular company, the Corrigan-McKinney Co. in Cleveland, that had been built by Mr. Corrigan and Mr. McKinney. At that time they had both passed on, and the company was owned by four estates.

Business was pretty dull and they wanted to sell it, so we took a good look at that and considered whether we should or should not go into the business.

[fol. 6773] Mr. Knudsen went over to look at the properties with me. We had people go over their business to see what the assets really were, and we finally decided not to do it.

We also looked at the Kelly Springfield Tire Company down at Hagerstown, Maryland. We finally decided not to buy that property either.

Q. You have referred to the fact that you had responsibility for the central purchasing of materials. Did you enter into any contract for the purchasing of materials by the central office of General Motors?

A. Yes.

Q. In the early 30's?

A. Yes.

Q. Do you recall any of those?

A. Well, we bought pig iron. We made a purchase contract for tires. We made a contract to buy wheels. Generally speaking, one of the responsibilities of the central purchasing office was to make sure that suitable suppliers would be available to the divisions. Generally speaking, the divisions did their own specific purchasing.

Most of the items that we required for cars and trucks were different enough that it was important to have the purchasing close up to the specifications and the quality

and the deliveries, and so forth. So that usually the purchase arrangements were made by the separate divisions, like Chevrolet, Buick, Cadillac, Olds, Pontiac, or Delco-Remy, New Departure, AC Spark Plug, and so forth.

We also operated as consultants with those purchasing people and the engineers and managers of those divisions at times.

Q. With whom was your contract made for wheels that you referred to?

A. Kelsey-Hayes.

Q. Do you recall in general what the term of the contract was, what period it covered?

A. It was two or three years.

Q. What about your pig iron purchases? Were those under contract?

A. About the same time.

Q. The same duration of time?

A. I think so.

Q. What about tires? With whom was that contract?

A. Well, I think the first tire contract was two years, or maybe a little less. It was two model years.

Q. Did you have any contract for the purchase of magnet wires as you recall?

A. Yes, we had a contract with Anaconda.

Q. What was the term of that contract, approximately?

A. I am not sure but I know it was a fairly long time. It was not six months or a year's purchase. It was a longer agreement.

Q. Who had the concept of making these contracts for a relatively long period, that is, in excess of a year?

A. It wasn't an absolutely new thing in the business. As the automotive industry developed very rapidly, at times the important thing was to get good suppliers and make sure you could get the parts. In earlier years, Mr. Durant himself had made long term contracts with some suppliers.

When I was operating the Delco-Remy Company, I did the same thing for the Delco-Remy Company. I have also made contracts on the other end. At one time Delco-Remy

made a contract with Chrysler Company to sell them their electrical equipment, lamps and shock absorbers, for five years. I negotiated it myself with Walter Chrysler so I was familiar with the concept.

I was always interested in getting good prices, but more interested in creating conditions and arrangements so [fol. 6775] that the supplier could manufacture at a low cost and sell to us at a low cost and still make a profit.

Q. Was there, in your opinion, any relationship between the term of the contract and making that possible?

A. When engineering and production facilities are involved and tooling, temporary short contracts are very expensive. The contractor or supplier cannot afford to make capital investment in new machinery and so forth, which he may have to depreciate over a period of ten or twelve years, and only have a six months' contract. It is quite a gamble.

So he either has to charge a big price during that six months and take the business risk, or be assured that he will have the business over a longer period of time so that he can make those kind of arrangements.

I remember one particularly, a purchase arrangement with the Dayton Malleable Company, which involved their putting in a new, complete, progressive manufacturing system in their foundry. They couldn't afford to do it unless they knew they were going to have our business long enough to make it a reasonable business arrangement.

Q. During the early part of your work in the central office, referring to 1929 and through the depression, did you have anything to do with the purchase of commodities or raw materials?

A. Yes.

Q. What was that situation?

A. Well, I recognized, at least, I thought so, that the prices on commodities were quite low, and that there were a great many people unemployed in the country as the depression came on, and that many concerns were liquidating their inventories down to a reasonable turnover at the

[fol. 6776] then low level of business, and that in itself was an added load on the country, because it took that much more production out of the whole economy of the nation.

I had been interested in the supply of basic commodities and the broad economics of business, and I recommended to the Executive Committee of General Motors that we buy some of these commodities at the then low prices, even somewhat in excess of what we might need at the time. We would need them later, and it would help to stimulate business at the low level it was then at.

I had a very simple idea. I was thinking about the unemployed people, and if they could just go out in the hills near their homes and pan out about \$3.00 worth of gold a day apiece, why, that would go right in the system, and everything would be stimulated and business would be all right again.

Well, of course, that was impossible because there was no gold that close. I thought, well, now, why not get more people employed in making nonperishable commodities and store them up and help get this thing over with? I fully expected, and it turned out that way, that ultimately General Motors would make a profit from doing it, too—do the right thing and make some money doing it.

Q. You referred to having suggested this to the Executive Committee, I believe you said. Do you recall what their reaction was?

A. Mr. Sloan was very interested in it. He thought it was a good idea.

Q. Was the committee also?

A. Yes. It was finally agreed that we would do it.

Q. Mr. Wilson, I will show you a document marked for [fol. 6777] identification as General Motors Exhibit No. 286, which is No. 2 in your Honor's book.

Is the action that is referred to in this exhibit dealing with the subject of the commodity or raw material purchases that which you have just described?

A. That is correct.

Mr. Hurd: If the Court please, I offer in evidence General Motors Exhibit No. 286.

I should like to read this exhibit. This is from the minutes of a joint meeting of Operations and Executive Committees of General Motors Corporation, July 17, 1930.

(Said document, so offered and received in evidence, was marked Defendant General Motors Exhibit No. 286.)

Mr. Hurd: Under the heading "Raw Materials—Future Commitments":

"There was discussed the question of whether we would be justified in making forward purchases of certain basic raw material in order to take advantage of what seem to be attractive prices existing at this time. The suggestion was made that we might purchase up to \$20,000,000 worth of such materials in excess of what we would ordinarily purchase for our scheduled needs but not in excess of what we could use during the year 1931 on the basis of a conservative estimate of production.

"The Committee was in sympathy with the idea of making forward purchases of certain raw materials provided a satisfactory plan can be worked out for submission to the Finance Committee. Messrs. C. E. Wilson [fol. 6778] son, John L. Pratt, Donaldson Brown and Wm. S. Knudsen were appointed a sub-committee to develop a plan for submission at the next meeting of this Committee for further consideration."

By Mr. Hurd:

Q. Was such a plan developed, Mr. Wilson?

A. Yes.

Q. Who handled the working out of the details of the plan?

A. I did.

Q. Mr. Wilson, I will show you a document that has been marked for identification as General Motors Exhibit No. 287, which is No. 3 in the Court's book.

This purports to be a report by you to Mr. Pratt dated August 25th, 1930.

Is that a report of the plan that you have referred to?

A. Yes, this is part of it. This particular one dealt principally with copper.

Mr. Hurd: If the Court please, I will offer in evidence General Motors Exhibit No. 287.

(Said document, so offered and received in evidence, was marked Defendant General Motors Exhibit No. 287.)

Mr. Hurd: I should like to read Exhibit No. 287. This is Mr. Wilson's report dated August 25, 1930, approximately a month after the Executive Committee's authorization:

"On analyzing the problem of purchasing commodities as we have discussed, I find the only feasible way in which we can reasonably make advance commitments [fol. 6779] is thru the concerns who fabricate material using the commodities.

"While in some cases it would be possible to buy futures in the commodities themselves, I do not believe it would be good policy for us to do this as we would then be competing with the fabricators of the material who might be protecting themselves for their ordinary requirements which would include their estimate of what our requirements might be, in other words, we would be artificially reflecting the demand for the commodities. For example, if we attempted to buy rubber futures at the present time, we would be competing with the tire companies who in line with their policy, would be protecting themselves for their normal requirements, which would include a percentage of our business.

"It seems to me that it is entirely feasible to work with our principal suppliers and obtain the price protection on the basic commodities discussed. The way I think the situation could be handled is as follows: using our Central Purchasing Committee as the vehicle for handling the work, we could estimate our requirements and work with the two or three Divisions who might be the principal users of the commodity involved. We could then handle the situation so that the basic commodity itself, with the commitment and the fabricating charge could be settled by the various Divisions.

"For example—we could make copper commitments for certain tonnages with Anaconda, American Smelting and Kennecott as the Divisions desired, depending [fol. 6780] on the price at which we could purchase the material and the fabricating cost on the heavy items of consumption. In the case of copper to make sure we were not making any mistake or anticipating ourselves in any way in the future, we would go over the matter very carefully with the following Divisions"—

naming six of them.

"The situation would be handled so that it was sufficiently flexible so that any change in our specifications for the fabricating material would not interfere in any way with the liquidation of the commitment on the basic commodity.

"In the case of lead, we would only have to deal with Delco-Remy, Frigidaire and Harrison Radiator. In the case of zinc, we would deal with A. C. Ternstedt, Guide Lamp, Harrison Radiator and Chevrolet.

"I do not see any way of covering on rubber or cotton except thru the tire companies. On the basis of the decrease of price of cotton and rubber we should be able to purchase tires at the present time for from 20 to 25% less than at this time last year.

"I believe, it would be worth while to set up the machinery for making such commitments within the next few weeks so that we will be in a position to take advantage of minimum prices."

By Mr. Hurd:

Q. Mr. Wilson, was this plan submitted to the Finance Committee of General Motors?

[fol. 6781] A. Yes, sir, it was working out of the plan under their broader appropriation for the \$20,000,000 expenditure.

Q. What action did the Finance Committee take regarding it?

A. They approved our going ahead with it. This was a very practical way to do it, because while you can look in your newspaper and can see that rubber is so much a pound

and copper is so much a pound, there are actually great variations in the specifications of the materials.

For instance, in tire building you have to have long staple cotton. In copper, you either have electrodes or rods or bars, and there are different specifications, whether you are going to use it in a brass foundry or in a wire mill, or roll it down for thin sheets to make radiators.

There is some variation in it. Also, there was a question of freight.

If you actually bought the copper you had to take it some place and put it somewhere; so obviously the thing to do was to leave the responsibility of the grades and specifications with the people that would finally have to use it so that we didn't get into the trouble of having the copper some day at the wrong place of the wrong kind.

The same thing applied to these other commodities.

Q. What commodities were covered by this plan of yours?

A. Rubber and cotton, copper, lead, zinc. There may have been a few others.

Mr. Hurd: If the Court please, I offer in evidence General Motors' Exhibit No. 288, the document that has been so marked for identification, which is No. 4 in the Court's book.

I should like to read a portion of this. This is from the [fol. 6782] minutes of the Finance Committee of General Motors Corporation, dated September 8, 1930, under the heading "Forward Commitments for Raw Materials."

(Said document, so offered and received in evidence, was marked Defendant General Motors Exhibit No. 288.)

Mr. Hurd: (Reading):

"There was a general discussion regarding the desirability of making forward commitments for materials, in view of the apparently favorable prices prevailing at the present time.

"It was the sentiment of this Committee that the operating executives should be permitted to contract for materials required in our business for a year in advance (based upon a conservative estimate of our requirements) in those cases where in their opinion such commitments are desirable purchases for the corporation."

By Mr. Hurd:

Q. Pursuant to this resolution, did you go ahead and carry out this program for the purchasing of raw materials or commodities?

A. Yes, sir.

Q. During what period of time did that continue?

A. It started in the fall of 1930 and it was continued for a number of years.

Q. Under whose direction was that work conducted?

A. It was under mine at the time.

[fol. 6783] Mr. Hurd: If the Court please, I would like to offer into evidence documents which have been marked for identification as General Motors Exhibit 289 to 296, both inclusive, and are identified in the Court's Book as Nos. 5 to 12 inclusive.

(Said documents so offered and received in evidence, were marked Defendant General Motors Exhibits Nos. 289 to 296, both inclusive.)

Mr. Hurd: I should like to read portions of a few of these documents.

The first one, General Motors Exhibit No. 289, which is No. 5 in the Court's book, is the minutes of meeting of the Operations and Executive Committees, General Motors Corporation, March 12, 1931.

Under the heading "Purchase of Commodities":

"Report was submitted by Vice-President Wilson dated March 11, 1931 (OC-916) showing purchases so far made of rubber, cotton, copper, zinc and lead, and upon motion, same was accepted and ordered filed.

"Upon motion duly made, seconded and unanimously adopted, it was

"RESOLVED, that it is the sense of this meeting that we should buy at this time our requirements of rubber, cotton, copper, zinc and lead to cover our estimated manufacturing schedules for the year 1931."

Attached to that is Mr. Wilson's report which is referred to in the minutes. It is dated March 11, 1931.

General Motors Exhibit No. 290 which is No. 6 in the Court's book, is from the Finance Committee minutes,

[fol. 6784] dated March 23, 1931, under the heading: "Forward Commitments for Raw Materials":

"Report of the Chairman dated March 23, 1931 showing forward purchases that have been made of rubber, cotton, copper, zinc and lead was read by the Secretary. It was explained to the Committee that because of the unusual conditions existing at the present time, and in harmony with the sentiment expressed by both the Finance and Operations Committees, we are purchasing our requirements of basic materials such as rubber, cotton, copper, zinc and lead to cover estimated production schedules for the calendar year 1931. Upon motion, this report was accepted and ordered filed, and the plan recommended of making purchases of basic materials up to the amount of our estimated requirements for the year 1931 approved."

General Motors Exhibit No. 291, which is No. 7 in the Court's book, is from the minutes of the Executive Committee, dated April 9, 1931.

Under the heading "Purchase of Basic Materials":

"Report was presented to the Committee by Vice-President C. E. Wilson, dated April 9, 1931 (OC-939) regarding commodity purchases that have been made, which was ordered filed.

"Upon motion, duly made, seconded and unanimously adopted, it was—" * * *

And I drop down to the last resolution on the page:

Resolved, that Vice-President C. E. Wilson be authorized to use his judgment as to future purchases of important commodities, it being suggested that it might be well to contract for an additional month's requirements from time to time up to the total amount required for the year 1931 when and as in his judgment market conditions justify, rather than to at this time purchase all of the balance of our requirements for the year 1931."

General Motors Exhibit No. 292 is Mr. Wilson's report, dated June 11, 1931, and has attached to it the Executive

Committee minutes of the same date approving Mr. Wilson's suggestions.

General Motors Exhibit No. 293, which is No. 9 in the Court's book, refers to Mr. Wilson's report in October, 1931 on his purchases of these materials and approves it. The report is attached.

General Motors Exhibit No. 294 is Mr. Wilson's report on these purchases in November, 1931.

General Motors Exhibit No. 295, No. 11 in the Court's book, is report on December 17, 1931.

The last one of these exhibits, General Motors Exhibit No. 296, contains the minutes of the Finance Committee of September 12, 1932, approving of the action of the Operations Committee with respect to these purchases.

By Mr. Hurd:

Q. Mr. Wilson, turning to another subject which you have mentioned, investigation of the tire business, do you recall how that subject arose—the investigation of the possibility of General Motors acquiring a tire factory?

[fol. 6786] A. As I recall, the Executive Committee asked Mr. Pratt to look into the matter. This was consistent with the broad policy of the company of assuring itself suitable sources for important materials and parts needed in the business, and being certain that year by year those parts could be obtained at a fair price, but a low price, as economically as possible, consistent with quality. That is what was done.

Q. I might call your attention, Mr. Wilson, to an exhibit which is in evidence, Government's Exhibit No. 1067, which appears in the Court's book as No. 13.

This is from the minutes of the Operations and Executive Committees under date of April 24, 1930.

I call your attention particularly to the last two paragraphs on the second page, which read:

“Resolved that it is the sense of this meeting that it is desirable for General Motors Corporation to engage in the manufacture of automobile tires in some way or other with the understanding that we should have a reasonable return on the investment.

"Resolved Further that Mr. John L. Pratt be appointed a committee of one to submit a report on this matter, it being the consensus of opinion of this Committee that both propositions discussed should be further developed and the facts submitted to this Committee."

By Mr. Hurd:

Q. Is that the action of the Executive Committee that you referred to?

A. Yes.

Q. Now, who conducted this investigation?

A. Well, a number of people were involved in it.

[fol. 6787] Q. Who had supervision over it?

A. The assistant comptroller of General Motors, a man by the name of Anderson at the time; Mr. Wennerlund, who was a technical man in the manufacturing staff; Mr. Armstrong, as I remember; Mr. Geyer, an engineer from Dayton; Mr. Midgley who had done some work in General Motors research on artificial rubber. A number of people tried to look over the whole rubber manufacturing industry, the tire manufacturing industry. Notice there were two ideas in the action of the Executive Committee. One was whether we should buy a company or not, and then if you did, whether you could make a fair return on the investment.

Q. These men you mentioned, were they the people who conducted the investigation?

A. Yes, sir.

Q. Under whose supervision was it done?

A. Mr. Pratt's, and to some extent mine.

Q. You know how that investigation was conducted, what these men did?

A. They visited different plants and discussed the industry with various people.

Q. Do you recall what plants they visited?

A. Oh, I think to some degree they visited practically all of the plants in the industry. Of course, we had reasonable entree to all of the plants because a good many of them were suppliers of ours, and we had a friendly relation with them.

I don't know in all cases that they showed us their books, but we could go through the plant and talk the business over with them in a general way.

I don't think most companies had any idea at the time that we might be interested in buying a plant; not necessarily so, though. The Ford Company was making part of [fol. 6788] their tires and there was a general discussion in the industry whether that was a good arrangement, or if it was enough of a specialty to keep it a separate industry.

Q. Did you personally conduct any part of the investigation?

A. I went down to look at the Kelly-Springfield plant in Maryland, and some of the United States Rubber plants.

Q. And what conclusion was reached by you and Mr. Pratt with respect to the desirability of General Motors acquiring some plant to go into the tire business?

A. The only one that we knew that probably would be for sale at the time was the Kelly-Springfield plant, and it didn't look to me like a good place to start any such development.

The figures that they discussed with us didn't show that it had been a profitable operating plant. Obviously their greatest trouble had been in the widely fluctuating prices of rubber particularly. It was a great hazard in the business, and it finally looked to me like it wasn't the thing to do, so I recommended against it.

Q. Did you present a report on the subject, do you recall?

A. Yes, sir.

Q. I show you, Mr. Wilson, Government's Exhibit No. 1069 which is numbered 14 in the Court's book, and ask you whether or not that is the report that you made on this survey?

A. Yes.

Q. And do you recall what action the corporation took with respect to this?

A. They temporarily dropped the idea of going in the business.

Q. I also call your attention, Mr. Wilson, to Government's Exhibit No. 1070, which is No. 15 in the Court's [fol. 6789] book, and ask you whether or not this is the

action of the Executive Committee that you referred to in turning down the proposition?

A. Yes.

Q. Now, Mr. Wilson, you also mentioned earlier that you did make a contract through the central office for the purchasing of tires.

Do you recall how that contract originated?

A. That was after this decision not to go into the business.

Q. Yes.

A. Well, Mr. Sloan and I discussed the matter, and he thought it would be a good thing to purchase part or all of the tires centrally, and I called a meeting of the purchasing agents' group and discussed it with them, and they advised against it.

I later discussed the matter with Mr. Sloan again and thought that it would be advantageous to buy 50 per cent of the tires centrally, and later combine with that purchase the suggestion that we underwrite the rubber and possibly the cotton to make it sound for a supplier to make an agreement with us over a long term basis for 50 per cent of the business, without having to charge us for what you might call the insurance of rapidly rising rubber prices. That sounded like a good idea to him, so we started to develop the plan.

Q. Who originated this idea of General Motors financing the rubber and cotton?

A. I did.

Q. And where did you get your idea?

A. Well, I had been interested in this kind of a thing for a long time. I never was interested in buying something from a concern at such a low price that they lost money on it.

I always like to make an agreement that would be to the [fol. 6790] advantage of both parties, and that would be fair over a long period of time. The automotive industry is very dependent on good suppliers, and I was always interested in both the suppliers, the dealers, and the people, as well as what might be a temporary profit position.

I didn't neglect that either, but I was always interested in the long term stability of business which was to the

advantage of everybody. I worked on that all my life, so it was nothing new.

Q. In what way did this program of buying rubber and cotton, in your opinion, guarantee the producer a profit?

A. He only had to take the business responsibility and risk for the thing that was under his control. In other words, the efficiency of fabrication in his plants, his ingenuity in working out newer and better ways of doing things, the amount of equipment that he had, was completely under his control.

It was proper for him to take a business risk on that part of it, but rubber was flitting from one dollar a pound to eight or ten cents a pound—it actually hit a low of 3½ cents a pound in 1932-33. That had actually been the curse of the tire business for years—this big flip in rubber prices. The rubber mostly came from abroad.

Prices were manipulated at times by foreign cartels. You never could tell where you were, and by just buying tires for three or six months at a time, the tire companies would have to spend money for expensive molds to make particular tires. They didn't invest money in their plants to achieve the minimum cost, and I knew it could be done, and that is what we would have tried to do if we had acquired a plant.

[fol. 6791] I thought if I could get somebody to go ahead and do it, make a reasonable profit on it, and give us the low prices at the same time, we would have the advantage that we would get from operating a plant of our own. We wouldn't have to have the management responsibility of a new type of business, nor of the added investment in it.

So that was the background of it.

Q. But when was it you started this concept of—

A. That was in the summer, in the fall of 1930.

Q. You say you discussed this plan with Mr. Sloan?

A. Yes, sir.

Q. And was it a private conversation between you and Mr. Sloan?

A. Yes.

Q. Was this also in the summer?

A. I don't mean the other men didn't know about it; there was nothing private in that, but at that stage it was

not a formal resolution of any committee, or anything like that.

Q. And about when did this occur?

A. In the summer or early fall of 1930.

Q. Now, was there any discussion, Mr. Wilson, with Mr. Sloan at this time regarding a company that you might deal with?

A. He asked me who I thought would be the best company, and I suggested that the Goodyear Company was perhaps the biggest at the time, and would be a good company to deal with. They were, as far as I knew, quite a progressive company. I thought well of them. He said that sounded all right to him, and we could start anywhere we wanted to, if I thought that is where it ought to be, why, to go ahead.

He said, "I have known Mr. Litchfield, the president, for years, and I know him on a personal basis."

[fol. 6792] I believe they went to MIT together. I am not real sure about it.

He said, "I will call him up and tell him you are really serious about it, and when it is convenient for him would he come over to Detroit and visit with you about it."

And that was done.

Q. About when did you have this conversation?

A. I am not sure which month it was back in 1930, but it was right about this time.

Q. Did you contact any rubber company before Goodyear?

A. No.

Q. And was anyone present at the time of this conversation other than you and Mr. Litchfield?

A. No.

Q. What was that conversation?

A. I discussed in general terms the relative advantages for our two companies of setting up something like this, in which we would buy the rubber and cotton and he would give us the equivalent of a fabricating charge to put those two important basic materials into tires of various sizes for us.

He didn't seem to think too much of the idea. He apparently wanted to buy his own rubber and cotton, and perhaps

thought it complicated his business relations with other companies. I don't know why, but he finally took the position with me that our two big companies had done business on a friendly basis for many years, and he didn't see any reason to change it, so he didn't take to the suggestion.

Q. Following that, was any other rubber company contacted?

A. There were discussions with the Goodrich Company, but Mr. Knudsen held those.

Q. Do you know whether or not the Goodrich quoted prices on this plan of yours?

[fol. 6793] A. They gave Mr. Knudsen some prices. The Chevrolet division, which was under Mr. Knudsen's charge at that time, had given business to the Goodrich Company. He was very well acquainted with Mr. Tew who was then the president and was buying half of the Chevrolet requirements from Goodrich. He discussed the matter with them, and as I recall, got some quotations on some other sizes of tires also.

But the point there was whether they wanted to expand the idea and take it or not, and, as I remember, Mr. Tew wasn't so enthusiastic about it, either. I guess he would have liked to have half of our business, but this was a new idea, and a new way of doing business.

Q. Was any other company contacted?

A. Well, United States Rubber Company later. The Firestone Company, which was the other great producer, had not been supplying tires to General Motors in recent years. The relations between Harvey Firestone, Sr., and Mr. Henry Ford, Sr., were very close, and they were regarded as a Ford supplier, so that as far as I know we didn't actually process the idea with them.

Q. How was the contract with the United States Rubber made?

A. Mr. Armstrong and I knew the local representative of the United States Rubber in Detroit, Emmet Sheahan. One of the plants was right there in town, so we thought that we would develop the idea with them, and after a preliminary discussion with Mr. Sheahan, he got the top executives of the company, Mr. Tompkins and Mr. F. B.

Davis, to have a meeting with us. We started to discuss the plan—was it a good plan or not, and what could you do with it?

Q. And you say, "a meeting with us." To whom do you [fol. 6794] refer?

A. Mr. Armstrong and myself, and later with Mr. Knudsen.

Q. And what did Mr. Davis—what position did he take on the subject?

A. Well, Mr. Davis and Mr. Tompkins began to understand what I was really talking about, and they thought it was a sound thing for our two companies, if we could work it out. There were a great many details and it took awhile to get them clarified completely, such as exactly how we would do this for all the different tire sizes and so forth. But in the fall of 1930, I guess, the contract—as I remember it was in early 1931—was finally signed.

Q. Who handled the price negotiations with United States Rubber from General Motors' standpoint?

A. We first wanted to make sure that the Chevrolet prices were satisfactory and would work out under this plan. Those were handled by Mr. Davis and Mr. Knudsen and covered the Chevrolet passenger tires and also the truck tires.

The Chevrolet business being half of General Motors' business, roughly—perhaps it was a little more at that time, it was very important that the plan, if it was to be successful and satisfactory, should work out right for Chevrolet so that we made the first review on the Chevrolet tires.

Q. Do you recall whether or not you obtained any figures from Goodyear as to what their prices would be, based upon the current prices of rubber and cotton?

A. After we decided that the plan was really practical and we could do it, just to make sure, and to get some prices from others on a known basis of cotton and rubber, we asked the Goodyear Company and the Goodrich Company to give [fol. 6795] us some prices—not prices they would sell us tires for at the moment, but what they could sell us tires for if they could buy the rubber and cotton at the then market basis which was eight cents or ten cents a pound.

Q. Did you obtain those prices?

A. Yes, sir.

Q. How did the prices of the three companies compare?

A. The United States Rubber prices were lower.

Q. Do you recall whether or not you made any report to the Operations Committee, on the subject?

A. Yes, sir.

Q. Mr. Wilson, I will show you Government's Exhibit No. 1089, which is No. 16 in the Court's book.

I also show you Government's Exhibit No. 1090, which is No. 17 in the Court's book.

Is Government's Exhibit No. 1089, accompanied with 1090, the report you made on the subject?

A. Yes, sir.

Mr. Hurd: If the Court please, I should like to read Exhibit No. 1089.

This is dated October 8, 1930, and is directed to the Operations Committee.

"A short time ago it was considered advisable to attempt to buy a portion of the Corporation's tire requirements on a basis whereby the Corporation would carry the risk and responsibility for the price of Rubber and Cotton, and the manufacturer all other costs. Negotiations were started with Goodrich Tire & Rubber Company and United States Tire & Rubber Company, Goodyear declining at the time to entertain the proposition.

"Prices were asked on the Chevrolet tire sizes on the basis of three factors:

[fol. 6796] "A—Rubber converted into lbs. of raw rubber.

"B—Cotton converted into lbs. of raw cotton.

"C—All other items of cost.

"Goodrich brought in figures as above, but added 6% to the total, for profit. United States included their profit in factor 'C'. When prices were compared, it was decided to ask for prices on other General Motors tire sizes, with the result that we have today a complete list of all, making it possible to compute the tire

prices by simply multiplying Factors 'A' and 'B' with today's market price and adding Factor 'C' to the total.

"Comparison developed that United States Tire & Rubber Company have given us the most favorable terms, and Mr. Pratt has notified them of our willingness to enter into a contract for $11\frac{1}{2}$ years on the above basis, and has at the same time signified our willingness to underwrite the purchase of up to 5,000 tons of rubber @ .08 per lb., this representing about 25% of the Corporation's requirements for one year and an expenditure of \$800,000.00.

"Immediately when the decision was announced to the trade, Goodyear and Goodrich both made application for permission to quote on the balance of the Corporation's requirements, or any part of them, at competitive prices.

"It is our opinion that it would not be desirable to close contracts for 100% of the Corporation's tire re-[fol. 6797] quirements, but that the remaining open 50% should be left to the Divisions to handle on the best possible basis. We therefore ask authority to conclude the contract for 50% of General Motors tire requirements with United States Tire & Rubber Company.

"A schedule is attached showing the savings effected over present prices, on the basis of rubber @ .08 and cotton @ .11 per lb., also showing the variation in quotations of the three firms."

Government's Exhibit No. 1090, which is No. 17 in the Court's book, is an attached summary of prices showing in the first column the sizes of the tires, and in the second column the prices quoted by United States Rubber, and in the third column those quoted by Goodyear, and in the fourth column, the current prices being paid by General Motors for the respective tire sizes.

By Mr. Hurd:

Q. Do you recall what the reaction of the Operations Committee was to your recommendation, Mr. Wilson?

A. They must have thought I did a pretty good job, because they approved.

Q. Mr. Wilson, I will call your attention to Government's Exhibit No. 1091.

Is this the action of the Operations Committee held October 9, 1930 approving your plan?

A. Yes, this is the formal approval of it.

Q. Following that, who conducted the negotiations for the detailed provisions of the contract that was made with United States Rubber in behalf of General Motors Corporation?

A. Mr. Armstrong and I.

[fol. 6798] Q. Now, I will show you, Mr. Wilson, Government's Exhibit No. 1092 which is No. 19 in the Court's book.

Is that the first contract which you negotiated with United States Rubber? It is dated January 1, 1931.

A. What is the date on it?

Q. January 1, 1931. It appears half way down the first page, the cover page.

A. Yes, this is it.

Q. Now, in this report which you made, you referred to the fact that you thought it undesirable to contract centrally for more than 50 per cent of the total requirements.

Whose idea was it not to contract for in excess of 50 per cent centrally?

A. I think it was mine.

Q. What was the basis of your view?

A. Well, I always liked to see things developed by evolution, and this was a new way of going at it. I was very much sold, and I thought it was very sound. I wanted to work it out, and at the same time I would have been unwilling to put 100 per cent of the tire business with one company, because of the hazard to the General Motors' business; it would have been too great. They might have had a big strike in the company and it would shut us down completely for "X" months, or they might have had a fire, or some other hazard. The General Motors' business was too big and important to jeopardize that way.

Q. Now, I think the record shows, Mr. Wilson, that an additional percentages agreement was entered into at the date of this contract, providing for additional percentages of tires for some of the divisions.

By whom were the negotiations for those additional per- [fol. 6799] centages conducted?

A. By myself for what were called the medium price class of automobiles, which was at that time the Pontiac—

Q. I believe you misunderstood my question. Are you about to talk about tire sizes?

A. Yes.

Q. No, I am referring to the fact that shortly after this first contract with United States Rubber was made, agreements were made between General Motors and United States Rubber that Cadillac would buy an additional percentage from United States Rubber, a percentage in addition to the 50 percent you had contracted for, and that Pontiac would—

A. Oh, the 50 percent agreement with United States Rubber Company made by the central office of General Motors did not prohibit the divisions from buying more tires, if they wished. We didn't recommend any important amount, but the understanding we had was that the divisions, like Cadillac, Pontiac, Olds and so forth, would go ahead and buy tires in the market at the market prices that the tire companies were willing to sell at, for the other half of the business. The question came up, could they buy a little more from the United States Rubber Company where they were sold on the United States Rubber tires and wanted to have some more of them, so that it was left with some flexibility.

Q. Well, who conducted the negotiations for these additional percentages?

A. Well, that was between the divisions, and I think Mr. Armstrong knew about it, too, because we still didn't want all of General Motors business put in one place. I don't think it ever went past 55 percent in total; perhaps it did by some minor fraction.

It was a cooperative—

Q. Was it on the recommendation of the central office

[fol. 6800] that the divisions bought additional percentages?

A. Not that I recall.

Q. The second contract with the United States Rubber is in evidence as Government's Exhibit No. 1114, dated January 1, 1932.

On behalf of General Motors who conducted the negotiations for that contract?

That is No. 20 in the Court's book.

A. Well, I did on a number of the features of it; other people helped me on the details.

Q. About this same time the record shows that an agreement was entered into between United States Rubber and General Motors Corporation under which General Motors Corporation was given a license to manufacture tires under United States Rubber patents.

It is in evidence as Government's Exhibit No. 1116, and is in the court's book as No. 21.

Do you recall whose idea it was to obtain this license from the United States Rubber Company?

A. It was my idea.

Q. And what was your purpose?

A. Well, there was still some little continuing discussion in General Motors that General Motors might want to go into the tire manufacturing business some day itself; and I thought just to keep the thing on a completely good basis all around; that I might as well get the rights. There weren't any very important patents—the United States Rubber Company had one that was quite interesting on a progressive manufacturing basis for making tires instead of building them one at a time by the old simple basis. They [fol. 6801] had licensed their competitors in most cases. The rights were not too valuable, but I did want to have the rights. It included what I called the know-how as well as the technical patents. I was just trying to look ahead a little bit so we could handle the thing in a proper way, no matter what our final idea was some day.

Q. Did you ever operate under the license?

A. No.

Q. Did you ever make any similar arrangement with any other companies on any other commodity?

A. Yes. It is not an unusual arrangement to make. It was often made by General Motors where some new development came along and the concern had a patent on it. There was a great hazard in putting 100 percent of General Motors' business in any one place, and frequently an arrangement was worked out where we could manufacture half of them if we wished and buy the other half from the people who had worked up the new plans and ideas and had the patents.

Other companies do the same thing, of course. We have made the supplying contracts with other automobile companies on the same kind of basis.

I remember one particularly with the Ford Company on fuel pumps. Our A.C. Spark Plug Division had developed a fuel pump and the Ford Company wanted to use it, but they hated to buy it all in one place, especially from their competitors.

So we gave them the rights to make the pump themselves if they wished, and the A.C. Spark Plug Division has had half or more of the business ever since. The Ford Company felt secure by having another supplier if they needed it. It is just a convention in the business, a sensible arrangement [fol. 6802] I might say as a matter of fact.

Q. I call your attention to Government's Exhibits Nos. 1138 and 1140 appearing in the Court's book at page 23.

These constitute the third contract with United States Rubber in May, 1933. On behalf of General Motors, who conducted the negotiations for that contract?

A. Well, I continued to be very interested in this particular contract. I was very sold on the idea to begin with, and I just wanted to make sure that it continued to be a good arrangement, so I worked on it.

Q. I also call your attention to Government's Exhibit No. 1173 which is the fourth contract which appears in the Court's book and that is numbered No. 24.

This is a contract between General Motors and the United States Rubber, dated August 1, 1936.

Did you also conduct the negotiations for that contract?

A. Yes, sir.

Q. Yes. Now, you started to mention a while ago something regarding the problem you had on tire sizes in connection with Pontiac. What was that?

A. Well, I started to tell you about another tire deal, not so big. The standard tire in the low price field that Ford, Plymouth and Chevrolet used was a 6.00 x 16 tire. The cars a little larger, or heavier, like Pontiac and a small Buick or Olds, took a 6.50 x 16 tire. Pontiac had a special tire of 6.25 x 16. It was just a little cheaper, a few pennies, than the 6.50.

Figuring it was really good enough for Pontiac—and I had weighed these tires, the big volume Chevrolet tire and the next size tire—on a per pound basis we were paying about \$2.00 a set too much.

I figured they could both be made by the same manufacturing process in the tire companies if they had enough volume to set up this progressive way of making them.

So I raised the question with various concerns and a representative in Detroit by the name of Lee Jackson of the Firestone Company. The others didn't seem to be much interested in my new idea, but Lee said, "I will call the old man in Akron and get him up here."

So Harvey Firestone, Sr., came up to see me, and he was quite a salesman, and gave me a very good selling on the merits of the Firestone tires and of a special process they had of using liquid latex in making them.

It was jokingly called in the trade as giving you a "gum dipping"—if you exposed yourself to the Firestone people they would give you a really good selling on it.

But after he tried his, I tried mine, and finally he said, "I think you have got something there. I will go back to Akron and let you know in a couple of days."

As the result we bought the 6.50 x 16 after they had a chance to set up the right way of making them, and had enough volume, so they had the other half of the business on that tire size.

Q. What divisions did that cover?

A. That covered Pontiac, Olds and the small Buick.

Q. Did you make a contract?

A. With the Firestone Company.

Q. With the Firestone, when was this?

A. I don't remember exactly.

Q. To refresh your recollection was it about 1936?

A. I think it would be along that time.

Q. Did you discuss this proposal of yours with anybody from the United States Rubber?

[fol. 6804] A. I think we did, but they didn't seem to be too interested in it. They already had half of the business, and they didn't feel quite as tempted to reach for it as the Firestone Company did.

Q. You made the contract with Firestone?

A. That's right, sir.

Q. Now, Mr. Wilson, since the conclusion of the Second World War, and since full production has been resumed, what, if anything, have you had to do with the purchases of tires from United States Rubber, or from anyone else?

A. Since the war?

Q. Yes, since the conclusion of the war?

A. Well, my responsibilities got stepped up a little bit and I lost interest in my old love of the tire contracts and I didn't pay so much attention.

Q. You didn't handle any negotiations?

A. No, they were more on the regular buying business. I don't know exactly what the contracts were recently.

Q. Did General Motors have a policy during the period of shortages during the war, regarding purchases generally?

A. Well, we felt this way about it: where we were suppliers of parts and equipment to others, we should take care of their business after the war, even though materials were short. Perhaps we could have made more money putting those materials into our own finished automobiles, but we didn't do it.

Any company that we had served before the war, we

told them we would take care of their business just like we had before. In other words, if we had half of their business, we would take care of half of it, whatever it turned out to be, or if we had all of it, we would take care of all of their business, whatever it was. We rather felt the same way [fols. 6805-6812] about our suppliers, that is that in the critical reconversion days it was a little difficult to find new sources, so most of our suppliers liked our business, liked the way we had been doing business, and wanted to keep on serving us, so that is about the way we carried it out.

Q. Mr. Wilson, in recommending the original contract with United States Rubber and the successive contracts that you did participate in, to what extent, if any, were you influenced by the fact that certain du Pont individuals owned stock in United States Rubber?

A. In no way whatsoever. I never even knew how much they owned. That had no bearing on it, and no du Pont ever talked to me about the contract.

Q. When you made your first contract in 1930, or beginning in 1931, did you know that the du Pont individuals had substantial investments in U. S. Rubber Company?

A. I don't think I did. I don't recall—I never knew anything about it, really.

Q. It is charged in the Complaint in this case that there was some agreement between the three manufacturing defendants, some of the individual defendants, that is, du Pont, General Motors and U. S. Rubber, that U. S. Rubber Company be favored by General Motors from the standpoint of their purchases.

Did you ever know of any such agreement or understanding?

A. No.

Q. Did you ever know of any understanding on the reverse side of this that United States Rubber Co. would favor General Motors as a source of materials that U. S. Rubber used?

A. No.

[fol. 6813] Cross Examination

By Mr. Harris:

Q. Have you had any occasion, Mr. Wilson, to talk to Mr. Ireneé du Pont or Mr. Lammot du Pont—did you have occasion at about this time, 1928 and 1929, about the Tire Department of U. S. Rubber?

A. No, I never talked to either of them about it.

Q. So you do not know, do you, unless you have learned it since this litigation, what Mr. Ireneé du Pont and what Mr. Lammot du Pont thought about the prospects of the Tire Department of U. S. Rubber?

A. I did not.

Q. I call your attention, so you may be informed, to Government's Exhibit No. 1074, dated September 14, 1928.

It is a letter to Mr. Walter S. Carpenter, and it discusses the General Motors' point of view on the rubber syndicate going into the purchase of rubber stock.

This is at the top of the second page:

"I called on Mr. Alfred Sloan before the meeting on Monday to learn what the views of the General Motors Company would be. Mr. Sloan stated to me in the presence of Lammot that the General Motors Company, if and when they got into the tire business, would want to own the facilities outright and would not consider having partners in the enterprise whose interests would [fol. 6814-6826] be at variance with the interests of the General Motors Corporation. Consequently if they went into the production of tires they would acquire facilities for that purpose rather than purchase stock in any large corporation."

Now, at that time, Mr. Wilson, did you have any discussion with Mr. Sloan along the lines of this letter?

A. No, I did not.

Q. I take it you had no discussion with Mr. Sloan about General Motors investing in stock of a rubber company?

A. No, I did not. Generally speaking, we thought that was a poor thing to do because we got management responsibility and got some complications with our partners, with selling to other people, and so forth.

Our experience has been that we got along very much better where we had all or nothing; only had a buyer relation with a good company that we believed in, or if we wanted to be in the business, we went in one hundred per cent.

Q. Yes, that was the idea to which you testified earlier this morning.

Do you recall now, Mr. Wilson, whether Mr. Sloan told you about that time that either of the du Ponts had talked to him about this idea?

A. No, I never knew anything about it.
[fol. 6827-6832] Then comes General Motors Exhibit No. 287 dated August 25, 1930, which I won't bother to show you. That is the letter of Mr. Pratt to you, suggesting the feasibility of working with the supplier on these purchases.

Then comes GM 288, and that is dated September 8, 1930. In this meeting you have Donaldson Brown, Mr. Carpenter, Jr., Mr. H. F. du Pont, Irene du Pont, Mr. Raskob and others.

I mention the names that I do because these are people who have been or are associated with the du Ponts.

This one concerns commitments for raw materials and allowing the operating executives to be permitted to contract.

A. Was that the Finance Committee at that time?

Q. Yes, sir, it was.

That was necessary; wasn't it, to go before the Finance Committee because of your buying futures, and things like that?

A. Well, \$20-million is money. That was the final authorization to do it.

[fols. 6833-6836] Q. Was there any significance in Mr. Lamot du Pont's leaving the meeting, if you know, after the resolution had been approved to make a contract with U. S. Rubber?

A. I don't know of any reason why he left.

Q. Do you recall any statement or anything else made by Mr. Lamot du Pont at that meeting?

A. No, I do not.

Q. U. S. Rubber would greatly benefit, would it not, by the contract such as was entered into?

A. Well, I thought it was a fair contract, and if they did the kind of things that I had been talking about, improved their factory processing and recognized that they could go ahead and count on the business for a year and a half, and count on General Motors for the responsibility of the rubber, they could make a go of it and make a profit. I have always wanted suppliers to make a profit.

But on the General Motors side I had gotten for General Motors some very, very favorable tire prices.

Q. The only question that I asked, and I think you answered it, was that it would be of great benefit to U. S. Rubber if they got this contract.

A. Well, very few people in the rubber business would have thought so, but Mr. Davis and Mr. Sheahan and Mr. Tompkins assured me that they could make a go of it at those prices.

[fol. 6837] Q. When, Mr. Wilson, did you first learn, if you have learned it, that Pierre, Irene, and Lamot du Pont were heavy stockholders of U. S. Rubber?

A. I don't recall exactly. Somewhere in the early '30's, I suppose. It had no influence with me one way or the other.

Q. I am not suggesting that, sir. I am just asking your knowledge.

I call attention to GM Exhibit No. 289—I don't need to read it—the joint meeting of the Operations and Executive Committees of March 12, 1931, reporting on these purchases of raw materials, including rubber and cotton, and I call [fol. 6838] attention to the fact that Mr. Lamot du Pont was present.

Also GM Exhibit No. 290, Finance Committee meeting, March 23, 1931, covering the forward commitments for this material, rubber, cotton, and so forth, at which Mr. Donaldson Brown, Mr. Carpenter, Mr. Irene du Pont, Mr. Lamot du Pont, and Mr. Pierre du Pont and Mr. Raskob were present.

I call your attention now to Government's Trial Exhibit No. 1114, which is a contract dated January 1st, 1932, and carries the same sort of provision for 50 per cent as the first contract.

On May 2nd, 1932, Government's Exhibit No. 1118, you have the additional agreement, 50 per cent for Oldsmobile, 50 per cent for Oakland-Pontiac, 15 per cent for Cadillac-LaSalle, and 50 per cent for GMC Truck.

I take it your answers would be the same as to those negotiations?

A. That is right. In total that may have been 55 or 60 per cent of the business, but I would like to mention again that, especially in 1932, the production of those particular Divisions was very low in General Motors.

Q. We were in the depression?

A. That is right, and the Chevrolet and Buick business carried the load.

Q. Now, I call your attention to Government's Trial Exhibit No. 1120.

It is a letter to you dated March 23, 1932, from Mr. Pratt. Mr. Pratt at that time, was he associated with you in the General Purchasing Committee?

A. Mr. Pratt had been active in this side of the business for a long time, and Mr. Pratt and I worked together on a great many things.

[fols. 6839-6857] Q. I call your attention particularly to the first sentence:

"I have gone over the proposed contract with the U. S. Rubber Company for 50% of General Motors tires."

Then I would like you to look, if you please, on the inside of the first page:

"I do not think that we in General Motors should contract for more more than 50% of the tires used in Canada, and should not execute the proposed letter whereby we would contract for a further 50% of Olds, Oakland-Pontiac, General Motors Truck, and 15% of Cadillac-LaSalle. In other words, I would leave with Canada, whose responsibility it is for these cars in Canada, the right to decide whether or not they wish to follow the practice of Olds, Oakland-Pontiac, Cadillac-LaSalle, and General Motors Truck in the States."

Did Mr. Pratt discuss with you at all the reason why he objected to that further 50 per cent?

A. I think it was just our standard policy of not getting too much concentrated in one place.

Q. However, as is obvious from the letter, you did go ahead and make the additional contracts for the additional 50 per cent?

A. I must have talked him out of it.

Q. You mean you were for that, were you, sir?

A. I mean he was my senior, and I thought it was all right because the volumes were so low at the time. So I guess I must have talked him out of it.

[fol. 6858] The Court: Counsel may proceed.

Mr. Harsha: I might say generally that the order which the Government intends to follow presenting its rebuttal evidence will be as follows:

We intend this morning to offer a number of documents without witness, and this afternoon we intend to call an officer of the General Motors Corporation as our first rebuttal witness.

Whereupon The Government. To Further Maintain The Issues On Its Behalf, Introduced The Following Evidence In Rebuttal.

OFFERS IN EVIDENCE (U. S.)

Mr. Harsha: The first document the Government offers, your Honor, is Government's Exhibit No. 26. These have been arranged in the order which we intend to offer them in the folder given to the Clerk, and this is a document entitled "Copy of PSduP's Handwritten Letter of August 28th, 1914"—presumably Pierre du Pont's handwritten letter of August 28th, 1914, addressed to "Dear Coleman," presumably Coleman du Pont.

I do not intend to read the entire letter but I should like to direct the Court's attention to a statement contained on the second page of this document, the last paragraph on the page, in which the statement is made:

"My suggestion of a plan is to put on the Executive Committee the men suggested by Irene, making him Chairman in charge of active operations in manufacture and sale. Enlarge the Finance Committee who will continue to outline the policies of the Company,

{fol. 6859] putting on it Alfred, Connable, Irene, Haskell and myself."

To this I believe there is no objection by counsel, to my stating this is a reference to the reorganization of the du Pont Company in 1914.

(Said document, so offered and received in evidence, was marked Government's Exhibit No. 26.)

Mr. Harsha: The Government next offers Government's Exhibit marked for identification No. 1345, and this document we discovered belatedly, should have been a part of Government's Exhibit No. 166. It was a covering memorandum prepared by Mr. John J. Raskob directed to the directors of the du Pont Company dated August 19, 1921, and I do not intend to read the entire document, but I should like to read a portion from the first page, the first paragraph which states:

"The enclosed history of the du Pont Company's investment in the General Motors Corporation (Exhibit -I) is very full and has been prepared with a great deal of care by Mr. Echols, Assistant Treasurer.

"We decided to invest in this industry in December 1917 and completed an initial investment of \$25,000,000 early in 1918. In 1919 this investment was increased to \$45,182,000; in 1920 to \$47,532,000; and in 1921 to \$75,581,000."

Skipping down to the fourth paragraph:

"As the Directors know we are now in control of the company and are completely responsible for its [fol. 6860] policies and management and our voting strength may be summarized as follows:"

Then there is a tabulation immediately below this. I don't intend to read the entire tabulation, but I direct the Court's attention to those who are included together with the du Pont Company as constituting a portion of its voting strength, including J. P. Morgan & Company.

(Said document, so offered and received in evidence, was marked Government's Exhibit No. 1345.)

Mr. Harsha: I should now like to offer Government's Exhibit No. 163. I do not intend to read from this document other than to call the Court's attention to the listing on page 8 of the document which is entitled, "Control of Chevrolet Motor Company."

This is a memorandum to the Finance Committee of the du Pont Company from John J. Raskob dated April 9, 1921, and I should particularly like to direct the Court's attention to the statement made in the middle of the page, in which it is stated:

"Chevrolet stock held by friends (see detail below)"

and opposite that is 44,162 shares, and under that it states:

"See detail below."

And below that are listed a number of the people falling within this category as set up by Mr. Raskob, including members of the du Pont family.

(Said document, so offered and received in evidence, was marked Government's Exhibit No. 163.)

[fol. 6861] Mr. Cox: May it please the Court, if I may, I should like to inquire of Mr. Harsha as to this document, what line of proof offered by the defendants this document is offered in rebuttal of.

Mr. Harsha: Well, this came up in the examination of Mr. Carpenter, in which we were asking Mr. Carpenter in regard to another related document, who in control of the Chevrolet Motor Company were the friends, so-called, as listed in that document, of the du Pont Company, which augmented the stock held by the du Pont Company, and the statement was made at that time that he had no knowledge concerning what was referred to in that particular respect.

I think that I could agree with Mr. Cox that we perhaps should have had this document before us at the time for Mr. Carpenter, but it was a withdrawn exhibit which we had overlooked in preparation for the cross examination.

Mr. Cox: I should be content, Mr. Harsha, if you will

agree that the document does not impeach anything Mr. Carpenter said in his testimony?

Mr. Harsha: I don't offer it as impeachment, but I would say as a full explanation of the point.

Mr. Cox: Because his testimony was simply that he didn't remember. I also point out to the Court that when he was examined he stated that Mr. J. P. Morgan wasn't a friend, and your Honor will note that Mr. Morgan is not in this exhibit.

The Court: Well, there is no objection?

Mr. Cox: No objection on the basis of Mr. Harsha's confession [fols. 6862-6866] that it is not offered on the basis of impeaching Mr. Carpenter's testimony.

Mr. Harsha: I should now like to offer Government's Exhibit No. 1346 which is a memorandum of C. R. Mudge, Director, addressed to Mr. W. S. Carpenter, Jr., dated September 24, 1936, in which he states that:

"I am returning your memorandum to Finance Committee dated September 18th. A short memorandum is attached with two suggestions."

[fol. 6867] The Court: Is there any objection to that procedure?

Mr. Harsha: No, I believe not, your Honor.

The Court: That will be the ruling.

Received subject to objections that may be raised later.

Mr. Hurd: Thank you.

Mr. Harsha: It has been pointed out by my associate, Mr. Harris, in order to make clear which are in disputed category, I think it would be well if counsel will state which of the documents they are entering their objection to as being what they consider not proper rebuttal.

Mr. Hurd: We will do that.

Mr. Harsha: The next exhibit I should like to offer is Government's Exhibit No. 199.

Mr. Hurd: We object to this on the same ground, if the Court please.

(Said document, so offered and received in evidence, was marked Government's Exhibit No. 199.)

Mr. Harsha: I do not intend to read extensively from this document—

✓ [fol. 6868] The Court: Pardon me. It won't be necessary for the Court to rule separately on each one. The same ruling stands, namely, received subject to objection to be ruled on later.

Mr. Harsha: Thank you.

This is a letter dated January 8, 1941, addressed to Mr. W. S. Carpenter, Jr., president of the du Pont Company, and it is written by Donaldson Brown.

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Next I should like to offer Government's Exhibit No. 237, [fol. 6869] which is a letter addressed to Mr. W. S. Carpenter, Jr., dated July 20, 1923, and written by Donaldson Brown.

Mr. Hurd: May the record show the same objection.

(Said document, so offered and received in evidence, was marked Government's Exhibit No. 237.)

Mr. Harsha: In connection with this letter, we are offering it in rebuttal to the testimony of Mr. Sloan, who stated, at printed page 2892 of the transcript that they, meaning the du Pont Company, had nothing to do with the Managers Securities Plan except to authorize General Motors Securities Company to sell Managers Securities Company a thirty per cent interest in General Motors Securities Company.

Then, again, the statement contained at page 2906 and 2907 of the printed record that the Managers Securities Plan was not intended and did not have the effect of making General Motors people responsive to the du Pont will.

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[fol. 6870] Mr. Harlan: I suppose Mr. Harsha will concede that this letter refers to a proposal in the discussion of Managers Securities Plan, which in fact never went through.

Mr. Harsha: This was at the formative stage. I would concede this is before the final details were worked out, but this directly bears upon the intent behind the formulation of such a plan.

Mr. Harlan: My point simply is it relates to a plan that did not go through and not to the plan that did go through, your Honor.

Mr. Harsha: I should next like to offer Government's Exhibit No. 238, which is a reply to the preceding Exhibit No. 237.

Mr. Hurd: May the record show the same objection.

Mr. Harsha: I should like to call the Court's attention to the paragraph beginning on the top of page 8 of this document.

[fol. 6871] This is a letter written by W. S. Carpenter, Jr., in reply to the previous exhibit, and is addressed to Mr. F. D. Brown, vice-president of General Motors Corporation, dated July 24, 1923.

(Said document, so offered and received in evidence, was marked Government's Exhibit No. 238.)

.

Mr. Harlan: This again, if your Honor please, does not refer in any way to the plan finally adopted.

Mr. Harsha: I don't wish to argue that point at this time, Mr. Harlan, but I think it has a direct bearing.

[fol. 6872] Next I should also like to offer in this series of correspondence Government's Exhibit No. 239, which is a memorandum by Irene du Pont to Walter S. Carpenter, Jr., dated July 26, 1923.

(Said document, so offered and received in evidence, was marked Government's Exhibit No. 239.)

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I might say with respect to this document that for the reasons I have stated in connection with Government's Exhibit No. 237, I believe that this is proper rebuttal to show the fact that the du Ponts were very actively participating.

The Court: Is this exhibit objected to?

Mr. Hurd: No, your Honor, I am not objecting to this.

Mr. Harsha: They objected to the preceding one, I believe, Government's Exhibit No. 238.

Next I should like to offer Government's Exhibit No. 1347.

[fol. 6873] Mr. Hurd: We do object to that document, if the Court please.

(Said document, so offered and received in evidence, was marked Government's Exhibit No. 1347.)

[fol. 6874] In connection with the grounds which we are offering this document for, your Honor, I should like to call to the Court's attention the testimony of Mr. Sloan, which I believe this rebuts, particularly at page 2906 of the printed record, where he stated in substance that the bonus plan on its face posed a possibility of a means of getting General Motors people to respond to the influences and desires of the du Pont Company.

We think this shows an attempt to influence the top GM management on the part of certain of the top management officials of the du Pont Company.

Next I should like to offer Government's Exhibit No. 1348.

Mr. Hurd: Same objection, if the Court please.

(Said document so offered and received in evidence, was marked Government's Exhibit No. 1348.)

[fol. 6875] We are offering this letter primarily, your Honor, in rebuttal to the testimony of Mr. Sloan, at page 2842 and 2846 of the transcript, and also to General Motors [fol. 6876] Exhibits 15 and 16, which purported to show how seldom Mr. Sloan attended meetings of the du Pont Company during the period that he was a director.

We think that this bears on the informal arrangements which were made outside of actual director meetings for acquainting the du Ponts with developments in General Motors.

I should now like to offer Government's Exhibit No. 458.

Mr. Hurd: The same objection, if the Court please.

(Said document, so offered and received in evidence, was marked Government's Exhibit No. 458.)

Next I should like to offer two exhibits which are related. First I will offer Government's Exhibit No. 483.

[fols. 6877-6888] Mr. Hurd: Same objection.

(Said document, so offered and received in evidence, was marked Government's Exhibit No. 483.)

Mr. Harsha: This is the letter written by Gordon Lefebvre, I believe it is—yes, Lefebvre, who is the General Manager of General Motors of Canada, Ltd., addressed to Mr. John Pratt, vice-president of General Motors Corporation, and dated February 8, 1927.

I don't wish to read this entire document, but in connection with this document I should like to offer Government's Exhibit No. 484, which is in response to the previous objection.

Mr. Hurd: Same objection, and also to Government's Exhibits No. 485 and 486 in this series of letters. We make the same objection to all of them.

(Said document, so offered and received in evidence, was marked Government's Exhibit No. 484.)

[fols. 6889-6891] Mr. Harris: If your Honor please, I will direct the Court's attention to Government's Trial Exhibit No. 1367.

[fol. 6892] Mr. Harris: I call the Court's attention now to Government's Trial Exhibit No. 1368, an excerpt from the Paint, Lacquer and Chemicals Department's monthly report to the Executive Committee for November, 1926, dated December 23, 1926.

(Said document, so offered and received in evidence, was marked Government's Exhibit No. 1368.)

[fol. 6893] We offer now Government's Trial Exhibit No. 1369, excerpt from the monthly report of the Chemical Products Division to the Executive Committee for February, 1927, dated March 22, 1927.

(Said document, so offered and received in evidence, was marked Government's Exhibit No. 1369.)

[fol. 6894] Mr. Cox: May I inquire, Mr. Harris, if this exhibit, too, is offered to show that as to paint General Motors was a very substantial customer or the largest customer?

Mr. Harris: That is so.

Mr. Cox: Is that the sole purpose of it?

Mr. Harris: Yes.

Mr. Cox: I have no objection to it.

I should not like Mr. Harris or the Court to be under any misapprehension on one point, however, and that is that it was not our position that that was not the case. I mean by that that General Motors was not a very substantial customer. In fact, I think some of our witnesses testified that it was a very substantial customer.

Mr. Harris: Yes, but Mr. Cox and your Honor, we are calling the Court's attention to these particular documents because of the size of the percentage and the detailed statement as to absolute figures and percentages.

[fol. 6895] Government's Trial Exhibit No. 1370 is excerpts from monthly report of the Automotive Finishes Division to William Richter for May, 1931, dated June 13, 1931.

(Said document, so offered and received in evidence, was marked Government's Exhibit No. 1370.)

Mr. Harris: The first line, to General Motors sales were \$542,632.00 or 81 per cent, in May; \$513,966.00 or 78 per cent of the entire sales in April.

Mr. Cox: May it please the Court, is that offered again for the same purpose?

Mr. Harris: Yes, it is, unless I change my purpose.

Mr. Cox: They are all offered to show the size of our sales to General Motors as compared to the sales of others?

Mr. Harris: Where they so indicate.

Mr. Cox: Where they so indicate, and for that purpose only?

Mr. Harris: I don't know what that "purpose only" means. I am stating the purpose at this time. I am not limiting myself.

Mr. Cox: Well, the reason I raise this, your Honor, is

that we do have a problem as to sur-rebuttal in one sense, and if the Government would be kind enough to indicate to us what these documents are offered to rebut where they are being offered—

The Court: Well, that would simplify matters.

[fol. 6896] Mr. Cox: It would make it much easier.

The Court: If you offer anything in sur-rebuttal.

Mr. Harris: These documents I now offer are to show that relationship which I have stated to the Court. Some of these documents may not, in the technical sense, rebut a particular witness, but it makes clear and gets at certain statements that may have been made. In other words, if they say it was a large customer and we show they took 78 or 91 per cent of the production, we think the Court should know that.

Government's Trial Exhibit No. 1371 is of the same nature, December sales to General Motors were \$370,463, whereas to other manufacturers it was \$23,709.

The same situation exists with regard to Government's Trial Exhibit No. 1372; General Motors in August, 1935 was \$319,924, and in 1935, July, it was \$670,948 as against sales to others in August of 1935 of \$195,967, and in July of \$161,668.

(Said documents, so offered and received in evidence, were marked Government's Exhibits Nos. 1371 and 1372.)

Mr. Harris: Government's Trial Exhibit No. 1373 is to show, if the Court please, one of the reasons why the figures may have been presented showing a loss by General Motors in certain sales are in this document accounted for in this fashion.

It is an excerpt from the monthly report of the Fabrics and Finishes Department to the Executive Committee for July, 1946, dated August 23, 1946.

[fol. 6897] (Said document, so offered and received in evidence, was marked Government's Trial Exhibit No. 1373.)

Government's Exhibit No. 1374 is of the same nature, an excerpt from the monthly report of the Fabrics and Fin-

ishes Department to the Executive Committee for May, 1947, dated June 27, 1947.

(Said document, so offered and received in evidence, was marked Government's Exhibit No. 1374.)

[fol. 6898] Exhibit No. 1396 is offered in whole and is a report to the Executive Committee from the fabrics and finishes department dated May 21, 1931.

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Mr. Cox: Is it your contention now that the complaint [fol. 6899] charges a restraint of commerce within Germany or in foreign commerce?

Mr. Harris: No, but I think that document shows, if the Court please, the relationship between General Motors and du Pont; the pressure that General Motors exerted. It is true it exerted it in Germany, but it exerted it on behalf of du Pont.

Mr. Cox: I think on the basis of Mr. Harris' statement I must object to this document. I have no desire to prevent him from ranging rather far afield, but I think in commercial transactions in Germany, in the German Republic in 1931, it is too much.

The Court: The Court will receive it subject to the objection.

Mr. Harris: We now have a set of excerpts, if the Court please, from documents which were not received until after our subpoena. They were received on subpoena, and they were not available to us during the presentation of the defense.

The first one is Government's Trial Exhibit No. 1375, excerpts from Annual Competitive Report (1935), dated March 5, 1936, from Fabrics & Finishes Department to Executive Committee of E. I. du Pont de Nemours and Company.

(Said document, so offered and received in evidence, was marked Government's Exhibit No. 1375.)

Mr. Harris: The document, if the Court please, is offered with the idea that here we have explanations of reasons for [fol. 6900] the loss or the gain of business of General Mo-

tors, particularly by changes in technology and other reasons, which were part of our contention on cross examination of the various trade relations witnesses offered by the defense:

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Mr. Neitzert: Your Honor, I wish to object to this group of exhibits referred to by counsel beginning with Exhibit 1375, and I think the series ends with 1385.

Mr. Harris: 1386.

Mr. Neitzert: 1386. These are excerpts from the annual competitive reports which were referred to by the witness Nickowitz and which were produced I guess by agreement.

Mr. Harris: No, no, by subpoena.

Mr. Neitzert: Your Honor agreed subpoenas would [fol. 6901] issue if they were required. I don't recall whether they were, or not—

Mr. Harris: There was a subpoena.

Mr. Neitzert: These excerpts are only fragmentary excerpts from those documents, but my principal objection to them is that they in no way refute anything that has been said by any witness in this case, and furthermore, everything that is said in these documents has already been said at least once and sometimes two or three times.

Take, for example, the steel top business which has been covered by one or more of the witnesses in this case, and also in most instances the same material appears in some document which has already been introduced in this case.

Mr. Harris: I think, if your Honor please, the documents first came to our attention, we were first able to learn about them after we had had the opportunity to cross examine. Had we had these documents, we certainly would have cross examined the witnesses that were put on the stand, and these are matters that are stated now or contemporaneously that witnesses, if they stated them at all, stated them as matters of memory, and we cannot now tell your Honor—

The Court: You may argue that matter in your briefs.

Mr. Harris: Yes.

I call the Court's attention to Government's Trial Exhibit No. 1376, excerpts from Annual Competitive Report (1936), dated March 24, 1937, from Fabrics and Finishes

Department to Executive Committee of E. I. du Pont de Nemours and Company.

(Said document, so offered and received in evidence, was marked Government's Exhibit No. 1376.)

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[fol. 6902] Mr. Cox: These documents have been objected to, and I don't want to argue that, but I should again like to point out that for the purposes of assisting the defendants to know what they must do to meet this rebuttal testimony, it would be very helpful if Mr. Harris would make a some-
[fol. 6903] what more definite statement about what these documents rebut.

This one, for example, leaves me utterly at a loss. I don't know what testimony the Government has in mind in offering this one.

Now, I don't want to burden Mr. Harris or unduly prolong the offering of this evidence, but we do have a problem about deciding what to do about the sur-rebuttal.

Mr. Harris: I submit we can give Mr. Cox references probably in the recess.

Mr. Cox: That will be satisfactory.

The Court: That will be satisfactory.

Mr. Harris: Government's Trial Exhibit No. 1377 is an excerpt from Annual Competitive Report (1937), dated March 23, 1938, from Fabrics and Finishes Department to Executive Committee of E. I. du Pont de Nemours and Company.

(Said document so offered and received in evidence, was marked Government's Exhibit No. 1377.)

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[fols. 6904-6905] Government's Trial Exhibit No. 1378 is excerpts from Annual Competitive Report (1938), dated March 9, 1939, from Fabrics and Finishes Department to Executive Committee of E. I. du Pont de Nemours and Company.

(Said document, so offered and received in evidence, was marked Government's Exhibit No. 1378.)

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[fols. 6906-6907] Government's Trial Exhibit No. 1379, excerpts from annual competitive report (1939), dated March 12, 1940, from Fabrics & Finishes Department to Executive Committee of E. I. du Pont de Nemours and Company.

(Said document, so offered and received in evidence, was marked Government's Exhibit No. 1379.)

[fol. 6908] Government's Exhibit No. 1380, "Excerpts from Annual Competitive Report (1940), dated March 4, 1941, from Fabrics & Finishes Department to Executive Committee of E. I. du Pont de Nemours and Company."

(Said document, so offered and received in evidence, was marked Government's Exhibit No. 1380.)

[fol. 6909] Government's Exhibit No. 1381, "Excerpts from Annual Competitive Report (1941), dated March 12, 1942, from Fabrics & Finishes Department to Executive Committee of E. I. du Pont de Nemours and Company."

(Said document, so offered and received in evidence, was marked Government's Exhibit No. 1381.)

[fols. 6910-6912] Exhibit No. 1382 is excerpts from Annual Competitive Report (1946), dated March 17, 1947, from Fabrics and Finishes Department to Executive Committee of E. I. du Pont de Nemours and Company.

(Said document, so offered and received in evidence, was marked Government's Exhibit No. 1382.)

[fol. 6913] Next is Government's Trial Exhibit No. 1383, "Excerpts from Annual Competitive Report," dated March 11, 1948, from Fabrics and Finishes:

(Said document, so offered and received in evidence, was marked Government's Exhibit No. 1383.)

[fol. 6914] Government's Trial Exhibit No. 1384, "Excerpt from Annual Market Survey," April 15, 1949, from Fabrics & Finishes Department.

[fol. 6915] (Said document, so offered and received in evidence, was marked Government's Exhibit No. 1384.)

Mr. Harris: Government's Trial Exhibit No. 1385, "Excerpt from Annual Market Survey (1949)," April 14, 1950, from Fabrics and Finishes.

(Said document, so offered and received in evidence, was marked Government's Exhibit No. 1385.)

[fol. 6916]. Government's Trial Exhibit No. 1386, Excerpts from Annual Market Survey (1950), dated April 11, 1951, from Fabrics and Finishes Department.

(Said document, so offered and received in evidence, was marked Government's Exhibit No. 1386.)

Mr. Harsha: May it please the Court, at this time the Government wishes to call Mr. Ralph Mark.

RALPH C. MARK, called as a witness on behalf of the Government, having been first duly sworn on his oath, was examined and testified as follows, to-wit:—

Direct examination

By Mr. Harsha:

May it please the Court, I should like to point out the Government is calling this witness to examine him regarding the return which the General Motors Corporation submitted pursuant to the Grand Jury subpoena issued preceding the filing of this complaint, and this deals with the [fol. 6917] matter of purchases by General Motors as set forth in the so-called Schedule "I" from alleged competitors of the du Pont Company.

That Schedule "I" was attached as an appendix to the brief of General Motor's Corporation which they filed in opposition to the Government's motion for the issuance of certain subpoenas which was recently passed upon by the Court.

By Mr. Harsha:

Q. Will you state your full name?

A. Ralph C. Mark.

Q. Where do you live?

A. Detroit.

Q. By whom are you employed?

A. General Motors Corporation.

Q. How long have you been employed by General Motors?

A. Twenty-three years.

Q. Twenty-three years?

A. Yes.

Q. Keep your voice up, Mr. Mark. What is your present position with General Motors?

A. I am Comptroller of the corporation.

Q. How long have you been Comptroller?

A. 1949.

Q. What was your position preceding that?

A. I was Director of the Cost Analysis Section on the Comptroller's staff.

Q. How long did you occupy that position?

A. Eight or nine years.

Q. Prior to that time?

A. I was employed in that same section, but in a lesser capacity.

Q. Have you had any employment with any other corporation other than General Motors during your business career?

A. I was in public accounting prior to the time I became associated with General Motors.

[fol. 6918] Q. How many years were you in that field?

A. Six or seven years.

Q. Where were you educated, Mr. Mark?

A. Ferris Institute, Big Rapids.

Q. Grand Rapids?

A. Big Rapids, north of Grand Rapids.

Q. Would you show Mr. Mark what has been numbered Government's Exhibit No. 1343 for identification?

The Court: Where would that be?

Mr. Harsha: I have prepared an excerpt from that, your Honor. The examination is going to be confined to Schedule "I." Exhibit No. 1343-A is the excerpt.

The Court: Was Exhibit 1343-A previously referred to?

Mr. Harsha: It is the same as this document, your Honor, just for purposes of keeping down the volume.

I might state this is an exhibit which the General Motors Corporation submitted to the grand jury, which includes their purchases from a great many companies. We are only concerned in this examination with the purchases which General Motors made from alleged competitors of the du Pont Company.

It is Schedule "I" contained in that exhibit.

Mr. Hurd: Pardon me, if the Court please, I don't believe we have a copy of Exhibit No. 1343-A.

The Court: I understand this was attached to defendant's brief?

Mr. Harsha: Yes.

[fol. 6919] The Court: If so, then you should have it, Mr. Hurd:

Mr. Hurd: This is the same thing that was attached to the brief?

Mr. Harsha: That is my understanding.

Mr. Hurd: All right.

Mr. Harsha: This is Schedule "I."

By Mr. Harsha:

Q. Directing your attention to the exhibit which you hold in your hand, No. 1343, can you tell us, Mr. Mark, what if anything you had to do with the preparation of this exhibit?

A. I supervised the gathering of the data that went into this exhibit.

Q. Will you turn to the so-called Schedule "I." Do you have that before you?

A. Yes.

Q. In particular reference to Schedule "I" of that exhibit, can you tell us what, if anything, you had to do in the preparation of that?

A. Yes. We got the instructions out to the Divisions, who in turn compiled the data which entered into this particular exhibit. It came back to us, and we consolidated it.

Q. Was this work performed under your supervision?

A. Yes.

Q. Did you issue any type of instructions to your Divi-

sions regarding the purchases which they were to list which went into the foundation of the figures?

A. We issued instructions but in broad terms.

Q. Would you describe generally what those instructions were?

A. Yes. I have a letter here that describes it, I think. We wrote a letter to each of our Divisions and listed the [fol. 6920] categories as they are listed there, and then attempted to give them additional typical information that would aid them in placing their purchases from competitors in those particular categories.

Q. To whom were these instructions sent?

A. To the Division Comptrollers of each of our Divisions.

Q. Each of your Car Divisions?

A. No, each of all of our Divisions.

Q. That would be your Car Divisions in addition to your Accessory Divisions?

A. That is correct.

Mr. Harsha: May I see that letter, sir?

I hope our numbering system is not becoming too complex, but I suggest we number this 1343-B for identification.

By Mr. Harsha:

Q. Is Government Exhibit for identification 1343-B, Mr. Mark, the instruction letter which you sent out to the Divisions of General Motors Corporation?

A. Yes.

Q. Now, in what form did you receive the compilations from the Divisions of General Motors?

A. In various forms as listed in the instructions contained in this letter.

Q. Turning to what is physically page 4—it doesn't appear to be numbered—I see a heading "Instructions For The Development of Purchases data."

Do you see that?

A. Yes.

Q. Are the categories which are there listed, are those the ones which were followed by your Divisions in submitting their purchase data?

A. Yes.

Q. So that you instructed them to list their purchases under four principal categories, am I correct? These being

[fol. 6921] Chemicals, Finishes, Fabrics and Anti-Freeze?

A. That is correct.

Q. Turning to the attachment to this letter, which is entitled, "Attachment B-1" which is physically page 8 of this exhibit.

Do you see the heading which states:

"The Following List is Indicative of the Type of Items to be Included as Competitive Purchases under Section 'Competitors of E. I. du Pont de Nemours and Company.'"

A. Yes.

Q. Can you tell us what are the various products that you have listed under these headings, Anodes, Solvents, Paints, and so forth? What are those supposed to be?

A. I am not acquainted with the technical details of them. They are supposed to be merely, as it says, indicative of the types of commodities or materials that would make up Anodes or Solvents, and so forth, as an aid to the Divisions.

Q. Am I to understand from this listing, take for example the first one that is listed, "Anodes," do you see that?

A. Yes.

Q. Under "Anodes" there appear to be perhaps ten or twelve types of Anodes. Do you know whether the Divisions in submitting their purchase data to you included their purchases of Anodes of any or all of these types?

A. Yes.

Q. They did?

A. They classified according to their own source of information; that is, their own experts were the ones that did the classifying at each of the Divisions.

Q. Did you have any conferences with those experts?

A. Only as an assist, and again backed up by experts of our own.

[fol. 6922] Q. Can you explain a little more fully what you mean by an "assist"?

A. We got advice from experts in our Research Laboratory Division, purely as an aid to describing some of the chemical terms. The Divisions themselves had buyers and

manufacturing people that were experts in their own line, and they followed out the application of it.

Q. Do you know whether all of the types of Anodes which are here listed in this schedule are Anodes of the types which are purchased by General Motors?

A. The Divisions that reported the information back felt that they were, and they are the experts, so we had to abide by their decision.

Q. Do you know whether all the types of Anodes which are listed here are of the types of Anodes that are manufactured and sold by the du Pont Company?

A. I do not.

Q. Now, in your Schedule "I," you have these various purchase data listed under the heading "Purchases from Competitors of E. I. du Pont."

Did you suggest that heading?

A. Well, no, I don't think I did. I don't know where that heading came from.

Q. Did you have available when you made this study any sales data prepared by the du Pont Company showing their sales to General Motors?

A. Yes, we had that, which was one of the aids in determining what commodities made up the various broad categories, such as Chemicals and Finishes.

That is, with other information, catalogs, pamphlets and the sampling, one month's sampling that we took in the month of June, 1948.

Q. Did you study that sampling, the result of that [fol. 6923] sampling?

A. We conducted our own sampling for the one month of June, and that sampling together with catalogs and pamphlets and that summary which you referred to furnished by the du Ponts, gave us enough information on which to elaborate the various categories.

Q. Would you show Mr. Mark Government's Exhibit No. 1344, please.

Government's Exhibit No. 1344 for identification is the tabulation to which you have just previously referred.

A. The one we had was a negative, but this looks familiar, as far as I can tell. This looks like it.

Q. You will note that it is headed "Sales by product to General Motors Corporation or 100 per cent own subsidiaries for the following years," and then there is a listing of sales by certain departments of du Ponts for the years 1938, '39, '40, '41, 1946 and 1947:

A. Yes.

Q. Was the material you received from the du Pont Company organized in this fashion, do you recall?

A. It looks like it was a copy of this.

Q. Would you turn to page 2 of that exhibit, sir?

Do you see the item listed under Electro-Chemicals Department about ten items down entitled, "Graphite Anodes"?

A. Yes.

Q. You will note that during the years 1946 and 1947, there are apparently no sales listed by the du Pont Company to General Motors Company. Do you see that?

A. Yes.

Q. Now, in your compilation by your Divisions, would they include purchases of, for example, graphite anodes for the years 1946 and 1947 irrespective of whether any had been purchased from du Pont?

A. Yes, I think they would if they were so told. Again, it would have to be up to the Divisions that actually made the classification.

[fol. 6924] Q. Now, turning back again to Government's Exhibit No. 1343-B, which is this instruction letter, am I correct on your attachment No. 1, that the various products that are listed there under Solvents consist of the various types of Solvents which were purchased by General Motors during this period 1946 and 1947?

A. I wish you would repeat that question.

Q. Are these products which were purchased by General Motors during 1946 and 1947, so far as you know?

A. Are you referring to this instruction letter of mine?

Q. Yes.

A. These products here?

Q. Under Solvents, yes.

A. Yes, that is what we told them, to list their purchases of products as classified on that attachment B to Government Exhibit No. 1343-B.

Q. I don't like to read off the names, and I probably couldn't pronounce them if I tried, but there are probably fifteen names of products listed there under Solvents. Do you know whether the du Pont Company was manufacturing each of those types of Solvents during 1946 and 1947?

A. No, I do not. Our Divisions felt that they must have because they apparently found invoices in payment of them.

Q. Do you have any recollection as to which of the types of Solvents there listed are the principal Solvents purchased by General Motors?

A. I do not.

Q. Now turning to the Solvents which you have listed under Finishes, do you see that on your Schedule "I"? That is the second item under Finishes.

A. Yes.

Q. The figure, for example, purchases by General Motors is shown to have been in 1947, \$1,102,389.00.

Comparing that with your instruction letter which you [fol. 6925] hold in your hand there regarding Solvents, do you know whether that figure consists solely of what is listed there as acetylated solvents?

A. I am not sure that I heard the last portion of that. Listed there as what?

Q. Were the purchases that are shown on your chart, did they consist solely of Acetylated Solvents?

A. I am sure I couldn't answer that question. The Solvents listed as a part of the \$1,102,389.00, so far as I know, are all of the Solvents that all of our Divisions bought from du Pont in the year 1947.

Q. I think you misspoke yourself, didn't you? Don't you mean from companies other than du Pont?

A. From companies other than du Pont. I am sorry.

Q. And so far as you know there may have been other types of Solvents rather than acetylated?

A. I couldn't tell you.

Q. Now, turning to another item listed under finishes, Mr. Hurd, is it agreeable, can we stipulate that the item Adhesives shown on Schedule "I" is not to be regarded as a part of the Finishes?

Mr. Hurd: That is correct. It is not a part of an automobile finish.

Mr. Harsha: Thank you.

By Mr. Harsha:

Q. Now turning to your Schedule "I," which is Exhibit 1343, you note the sum there, for example, 1947, there are listed purchases by General Motors from others than du Pont of \$3,055,580.00.

A. Yes.

Q. Do you know whether this figure is composed of all [fol. 6926] Adhesives purchased by General Motors?

A. So far as I know it is. If they followed the instructions that we gave here, as long as the Adhesives were of the same type that were sold by the du Pont Company.

Q. Do you know whether the Adhesives which are here shown as purchased from companies other than du Pont includes Adhesives other than "Neoprene" base Adhesives?

A. I don't know.

Q. Turning to the next general heading, that of Fabrics shown on Schedule "I," there are two general category breakdowns shown, namely, Coated Fabrics and Imitation Leather.

Can you tell me what distinction is made between those two categories, that is, in the compiling of these figures?

A. Well, largely I think we were guided by the type of catalogues, type of merchandise that the du Ponts published plus the advice of our so-called experts, chemical engineers, and the analysis that we made of June, 1948, in detailing these items of each of these broad categories.

Q. Do you know whether the item, for example, "Imitation Leather," is restricted to what has been called in this case as pyroxylin coated fabrics?

A. No, I do not. Our Divisions that handle and buy imitation leather, I would assume, would know that. I don't.

Q. Do you know whether there is any relation between the category here listed as "Imitation Leather" and the

use of this fabric for upholstery and trim? Is it limited to that, do you know?

A. I do not.

Q. Do you know what the usage is to which coated fabrics are put?

A. I do not.

Q. Let me see if I can clear up one thing in your letter of instructions that I don't quite understand. Do you see [fol. 6927] your attachment headed, "B-2," at the very end of this exhibit, page 3?

A. Yes.

Q. Now I see a heading there, "Fabrics," and then under that various types of products are listed. Can you tell me whether the products "Imitation Leather," "Coated Fabrics," "Air Brakes," "Automotive Brakes and Parts," and so forth; are those all under the general subject of "Fabrics"?

A. So we were told when we compiled the letter.

Q. Do you know whether these figures which enter into the compilation shown on your Schedule "I" include the purchases by General Motors of fabrics for each of the uses as shown here, "Brake Linings," etc.?

A. No. I do not. The Divisions that classified them and handled it and were the experts on it knew that.

Q. Did you ever discuss this problem with your experts?

A. Broadly, at the time we issued the letter of instructions.

Q. Do you recall having any conversation with your experts regarding this matter of coated fabrics versus imitation leather?

A. Not specifically, no.

Q. Is this a fair assumption to be made from this compilation as measured against your instruction letter, Mr. Mark, that included in the items of coated fabrics may be fabrics which are used for brake linings?

A. I don't—

Mr. Hurd: If the Court please, I think counsel is a little confused by the document.

Mr. Harsha: I will concede that.

Mr. Hurd: At the time this was sent out, we were subpoenaed to produce information regarding certain other [fol. 6928] companies, among them, competitors of Bendix Aviation.

This instruction letter, you will notice on the page marked "No. 2," deals with the items that are purchased from competitors of Bendix Aviation, and these last items that counsel has just referred to, appearing in "B-2," under the heading "Air Brakes, Automotive Brakes, Carburetors, Brake Linings," and so forth, relate to the aviation purchases.

They are not relating to the du Pont items or competitive to du Pont. I think with a closer reading of the document, if you had time to study it, you would see that that is what it means.

Mr. Harsha: Thank you, sir.

Mr. Hurd: All right.

By Mr. Harsha:

Q. Directing your attention once again to this letter of instruction which you sent out to the Divisions of General Motors, Mr. Mark, I would like to draw your attention to the attachment "B-1," which I gather from the heading does relate to purchases made from others than du Pont, and on page 2 of that you notice the heading, "Fabrics," at the bottom of the page?

A. Yes.

Q. And under that coated fabrics, and there are listed there "Fabrilit," "Cavalon," "Fairprene." I don't notice any listing for imitation leather. Do you know whether imitation leather was a subject matter or a category head which was subsequently decided upon?

A. This attachment "B-1" was never intended to be complete. It was only a guide set up in order to describe to Divisions as best we could what was meant by the term in this case.

[fol. 6929] fabrics. It could have been thousands of items could have been added and weren't.

Q. Insofar as you know, you don't recall any discussion on how you decided what was a coated fabric and what was imitation leather?

A. No, I do not.

Mr. Harsha: May I have the Court's indulgence for just a minute?

Your Honor, I believe that is all I have with this witness.

Cross-examination.

By Mr. Hurd:

Q. Mr. Mark, with reference to this circular letter, Government Exhibit No. 1343-B that you have been dealing with, before your preparation of this letter, did General Motors, if you know, make any check of its purchases of these same general items from competitors of the du Pont Company?

A. Yes. We selected the month of June, 1948, just prior to the subpoena, and used that month as a sampling in order to determine products that were competitive and from whom we bought them, and whatever other information would be helpful in compiling the final job.

Q. The month of June, that would be the last month prior to the issuance of the subpoena?

A. That is right.

Q. And at that time the invoices, would they be available?

A. They would all have been available for that one month.

Q. Then after the preparation of that, what we might refer to as a "spot check," it only related to one month, it was some time after that, then, that you prepared this [fol. 6930] circular letter?

A. Yes, it was in January. I think that is the date of this circular letter. So we spent the balance of the time from, say, the end of September until January in studying and getting this data together for the letter of instructions that went to the Divisions.

Q. Now, if you turn to the fourth page of this circular letter, 1343-B and find the four categories, Chemicals, Finishes, Fabrics and Anti-freeze, with the various items under each, from what source did you obtain those four basic categories, plus the subdivisions as there listed?

A. These we got from Mr. Hogan in the Legal Department, which I understand came from the letters that he had received from the Government or the Government attorney.

Q. In other words, those were the categories that you understood the Government wished to use in making the survey?

A. That's right.

Mr. Harsha: We will object. I move to strike that because there was no indication on the part of the witness that he knew something that was referring to others. It was just his understanding. He didn't see the letters.

Mr. Hurd: Well, he said it was his understanding.

The Court: He can only testify to what he knows of his own knowledge.

Mr. Hurd: Well, that was the source of the information, so far as he was concerned.

By Mr. Hurd:

Q. Those were the categories that you used, are they not, in preparing the grand jury return which is Schedule [fol. 6931] "I" of the complete return and is referred to in these exhibits as 1343-A?

A. That is correct.

Mr. Hurd: If your Honor please, I don't think there will be any question about the source of the categories, as to who originated them, but I mention it just now in case there is any uncertainty in counsel's mind. I intend to offer the document on surrebuttal that we have, letters of Mr. Hotchkiss to me which set forth the categories he wished to cover.

Mr. Harsha: And do you also intend to offer your draft of letters submitted to Mr. Hotchkiss of the categories? Have you seen his letter?

Mr. Hurd: I haven't seen his letter. I better look at it. It might be a good document to see.

Mr. Harsha: We will be glad to produce it.

By Mr. Hurd:

Q. As to the breakdown in the attachment "B-1" of this circular letter, where illustrations are given as to the type of products falling under these various headings that appear on the fourth page, for example, under the heading "Chemicals", sub-heading "Anodes", and the various types of anodes, from what source did you obtain the detailed breakdown appearing under "Anodes"?

A. Well, from a number of sources. They came out of the June 1948 sampling. They came from this expert of our own Research Department. They came from catalogues, pamphlets and some, I believe from the document which I was shown here previously on the sales of the du Pont Corporation to General Motors.

Q. The du Pont return to the Grand Jury subpoena, whenever that was?

A. Yes, that is right.

[fol. 6932]. Q. By the way, you were shown a one sheet document. Do you recall whether it was just one sheet, or whether it was a multiple sheet?

A. It was a multiple sheet.

Q. And was anybody in on the determination of the items to be included in this "B-1," other than yourself? You handled all of that alone, or was anyone else in on the discussion?

A. No, I merely supervised it. I had several men under me. We had, as I say, members of our own Legal Department, Mr. Hogan, and the Divisions, several of us aided.

Q. The Central Office?

A. The staff.

Q. Did the Research people have any part in it?

A. Yes, as I say, I think I mentioned the chemical engineers and a lot of the technicians and the Research Laboratories assisted in the—

Q. At the time you made this up, was it your understanding or not that the items listed here were the type of items being manufactured by the du Pont Company?

A. Yes, they were the type of items being sold to General Motors.

Q. And if you will turn to "Attachment B-2" for the

moment, this lists the same categories, but lists names of purported suppliers. From what source did you obtain these names?

A. From the same sources, from the June, 1948 sampling that we took from the Divisions' purchasing agents, buyers.

Q. To begin with, is that anything other than a summary of the returns you received from the various Divisions in response to your circular letter?

A. That is all it is.

Q. And do you have any personal knowledge as to what [fol. 6933] the particular items were, or as to who made them?

A. No, my association was strictly—we tried to define it as well as we could, let the experts classify it, and we put it together.

Q. Was it or was it not your understanding that Schedule "I" contained the dollar purchases of the respective items named, purchases by General Motors Company from companies who were competitive with the du Pont Company as to those particular items?

A. That is correct.

Mr. Hurd: That is all.

Redirect Examination.

By Mr. Harsha:

Q. Just a question or two, Mr. Mark.

Mr. Mark, referring to the Schedule "I," preparation of which was under your supervision, as I understand it, this only relates to a period of two and a half years, does it not, of the purchases by General Motors?

A. That's right.

Q. From companies other than du Pont for 1946, 1947 and half of 1948?

A. That is my understanding.

Q. Now, I believe you stated on cross-examination that it was your understanding that the items included in this Schedule "I" were the type of items then being produced and sold by du Pont, is that correct?

A. No, those were items of the type that we bought from others to the best of our knowledge, which were of the type that du Pont was selling to General Motors.

Q. But were of a type that were also being produced [fol. 6934] and sold at that time by du Pont?

A. To the best of my knowledge, yes.

Q. Did you investigate that point?

A. I did not.

Q. Now, if, for example, you found from looking at the —I believe you indicated that you also had the du Pont return at the time that you prepared this General Motors Schedule "I"?

A. Yes.

Q. Now, if you found that the du Pont Company may have made sales to the General Motors Company in the years preceding World War II, say in 1938, when the study begins, but there are no sales indicated to General Motors in the period 1946 and 1947, did you make any investigation to determine whether du Pont was still producing such items?

A. No, we did not.

Q. In that connection, Mr. Mark, upon whom did you rely to determine whether the material returned by the Divisions was an item competitive with a product being manufactured by the du Pont Company?

A. We relied on the people at the Divisions that were buying and using the material and would know more about it than anybody else.

Mr. Hurd: That is all.

Mr. Harsha: That is all.

(Witness excused.)

Mr. Harsha: Mr. Hurd pointed out that we have not introduced exhibits that were used on examination of the witness and I will introduce them now.

The Court: Is there any objection to the offer?

[fol. 6935] Mr. Hurd: Yes, there is to certain of them.

The Court: You are referring to 1343-A and 1343-B?

Mr. Hurd: There is an objection to 1343, if the Court please. I think it is different from the type of objection we were discussing this morning. Government's Exhibit

No. 1343 is a complete return that General Motors made to the Grand Jury subpoena which dealt with any matters not concerned in any way with the issues in this case.

Among other companies being investigated at that time were Bendix Aviation Company, North American Aviation Company, Remington Arms Company, and I don't recall what all, but anyway this document was a complete return and covered everything, so that it has many sections that are completely irrelevant, and I think should not be introduced, and I think the exhibit ought to be cut down to begin with to the portions pertinent to this particular suit.

I can indicate——

Mr. Harsha: May I interrupt? I think there will be no problem on this. The somewhat unique system we have used in numbering this, in this respect to this exhibit, I think has been confusing, but we have tried to meet just this point.

I do not want to offer the entire General Motors' return to the Grand Jury because, as Mr. Hurd points out, much of it is irrelevant to the issues in this case.

The Court: You can work that out in conference between you.

Mr. Harsha: We have made a photostat of the one Schedule "I" which we would like to offer as Exhibit No. [fol. 6936] 1343-A which consists of eight pages, and they are graded according to size of purchase for each item.

(Said document so offered and received in evidence was marked Government Trial Exhibit No. 1343A.)

Mr. Hurd: May I suggest that we take it up with counsel later?

The Court: Yes.

Mr. Hurd: In that connection there is further objection to a portion of what Mr. Harsha proposes to offer in the form of 1343-A. The fourth item on it dealing with the subject of anti-freeze, I think that particular item should be eliminated from the exhibit due to the fact that the subject of anti-freeze has not been gone into at all, as far as the purchases are concerned, by the defense, and the subject of anti-freeze is a story unto itself.

We did not go into it because it didn't answer anything that the Government had introduced, but if this particular evidence is to go in at this time, it means that on surrebuttal we must call witnesses to go into that particular item, and so I would like, apart from the procedure we followed this morning, as far as that particular item is concerned, to ask the Court to rule on that at this time so that we may have guidance as to whether it will be necessary for us to go into it on surrebuttal.

As I say, I don't believe there was anything in the Government's original case, or in the defense, relating to the subject of anti-freeze, except some correspondence back in the very early '30's or late '20's, but nothing about the current story which these figures relate to, and which the witnesses would have to cover.

[fol. 6937] This also comes up in certain other exhibits that the Government has advised us it proposes to offer as a recurring subject.

Mr. Harsha: May I speak as to this one particular item?

I think Mr. Hurd would agree with me if he looked over the documentary evidence put into evidence by the Government, that we had a section dealing with the subject of anti-freeze in our case in chief.

It is true we did not have sales statistics, but this was for the period beginning, I believe, in the middle twenties, and carrying on from there, but I don't think that should restrict us from showing what are the purchases by General Motors of anti-freeze from the du Pont Company and from others than du Pont during the period when we do have figures available.

We have had no sales statistics for these earlier years, going back to the twenties and the thirties, but if, as we contend, this is one of the items purchased almost exclusively from du Pont as the sales statistics themselves show, as I recall du Pont was perhaps 90 percent supplier of anti-freeze to General Motors—I don't think the Government should be barred from showing that in analyses of these sales statistics.

Mr. Cox: May it please the court, I have an interest in this question, and without repeating what Mr. Hurd said, I would like to address myself to it briefly.

The point, I think, is this, that while Mr. Harsha is quite right that there was certain evidence in the Government's case in chief about anti-freeze, that evidence consisted, if my recollection is correct, entirely of certain letters that [fol. 6938], related to a controversy that arose some time in the twenties.

Perhaps "controversy" is too strong a word, but a question arose at that time as to the relative merits of ethyl alcohol and glycerine as anti-freeze, and there was correspondence which the Government offered between Mr. Pratt and Mr. Sloan and perhaps someone in the du Pont Company, relating to this matter.

Now, in our case in chief, I think it would be accurate to say that we did not deal with that subject at all. Certainly I did not in my case, because I was content to rest on the Government's own evidence. The statistics which Mr. Harsha now proposes to introduce have nothing to do with that subject matter at all. They have nothing to do with ethyl alcohol or alcohol or glycerine as an anti-freeze.

As this exhibit relates, they refer to methylene alcohol and methyl glycol which are two synthetics. So far as the du Pont Company is concerned, after the date of the correspondence which the Government offered as its case in chief, in that connection they represent new and wholly different subject matter.

At one time, I would like to say to the Court, I have considered putting on a witness or two witnesses, perhaps three witnesses, as part of my case in chief to deal with this new subject matter, but when the Government presented no statistics in its case in chief, and no evidence relating to the methylene or ethylene glycol, I ceased that part of my preparation and abandoned an attempt to present or press that evidence to the Court.

Now, in this evidence, if this evidence is to be admitted on this new subject-matter, then I feel that as Mr. Hurd [fol. 6939] said, that I must under the circumstances ask the Court's permission to produce those witnesses or at least a witness as a part of surrebuttal, and I would ask the Court if it is appropriate to consider that aspect of the matter and to perhaps rule on it at the same time that the

Court rules on the admissibility of this document, because I feel that without criticizing Mr. Harsha in any respect whose burdens I fully appreciate, that this is a case in which, if we are not allowed to present our side of the controversy, we will be substantially prejudiced as a result of the Government's coming now forward for the first time with this evidence.

Mr. Harsha: Well, I would like to speak from this point, your Honor, because I think it poses a problem which is perhaps slightly broader than just a question of anti-freeze.

What we are attempting to develop here is the available sales data which we think that the Court should have bearing on the comparison between the percentages supplied by du Pont to General Motors as opposed to all competitors of du Pont in their sales to General Motors, and I think that if we are to present data of that type for the periods which we have relatively full figures available, namely 1946, 1947 and part of 1948, that it is certainly prejudicial to a full understanding of that sales relationship that existed between du Pont and General Motors if certain items are excluded from that tabulation, because obviously if you eliminate those items in which du Pont was predominantly the supplier, and then limit it to certain items on which I think we will contend du Pont is really not competitive at all, and not in position as a supplier with respect to many of these items, a wholly false picture is given, and for that [fol. 6940] reason it seems to me that where the Schedule "I" was prepared by General Motors, all we are attempting here is to reproduce the sales data they have submitted, together with explanations which we get through witnesses as to whether certain of these products are competitive or are not competitive between du Pont and other companies.

The Court: Well, it is the Court's judgment that the evidence should be received and followed. Of course, under the circumstances the defendants would be permitted to introduce evidence on rebuttal.

Mr. Hurd: Thank you.

Mr. Harsha: Thank you.

Now, just so the record is clear, your Honor, perhaps I should make it clear that I am offering in evidence Government's Exhibits 1343-A, which is a photostat of the Schedule "I," together with a tabulation, subject to new inaccuracies that the tabulation will have. Then I am also offering Government's Exhibit 1344 which is a schedule of sales by the du Pont Company to General Motors during the period 1938 through 1947, and also the Comptroller's circular letter which is Government's Exhibit No. 1343-B, dated January 31, 1949—

(Said documents so offered and received in evidence were marked Government Trial Exhibit Nos. 1343A, 1343B and 1344.)

Mr. Hurd: Now, if the Court please, I would like to have the objection we had this morning as to all of these documents, with the exception of the portion relating to anti-freeze, on the ground that they are not proper rebuttal, to have that fall under the general rules, and we [fol. 6941] can argue that in connection with the brief, if that is agreeable.

We did appreciate having a ruling on the anti-freeze because that involved putting in further evidence.

Mr. Harsha: Mr. Cox pointed out to me that there may be some problem as to conferring on this du Pont schedule, and I will take it up with counsel to make sure that we all have the same papers.

Mr. Cox: My point was that you described it in terms of "Let the record show it is complete." I think it is complete. It may be that it is not complete, but I think the record should not be—

Mr. Harsha: That's right.

Mr. Harris: If your Honor please, this witness' examination will be directed to the Government's Exhibit No. 1343-A, the item of adhesives, and Government's Exhibit No. 1344, the item of heavy bodied cement and pyroxylin solutions.

LOUIS F. WEYAND, called as a witness on behalf of the Government, in rebuttal, having been first duly sworn, was examined and testified as follows:

Direct Examination.

By Mr. Harris:

Q. What is your name?

A. Louis F. Weyand.

Q. Where do you live, Mr. Weyand?

A. St. Paul, Minnesota.

Q. Give us the street address.

A. 1753 Summit Avenue.

Q. What is your occupation.

A. I am an executive vice-president of the Minnesota [fol. 6942] Mining & Manufacturing Company.

Q. What does the Minnesota Mining & Manufacturing Company manufacture principally?

A. Abrasives, various kinds of tapes, including the Scotch brand cellophane tapes, and adhesives and coatings.

Q. How long have you been with Minnesota Mining?

A. 38 years.

Q. Briefly, what positions have you filled?

A. Office clerk, salesman, sales manager, division sales manager, general manager of a division, and a vice-president, and then latterally this other position.

Q. Yes. What adhesives does Minnesota Mining make? What are the general categories of adhesives?

A. Well, they produce adhesives which basically are of reclaimed rubber, resins, various clays, and also synthetic rubber adhesives which also include clays, resins and solvents.

Q. And does that include "Neoprene" base?

A. That includes "Neoprene."

Q. Now, is General Motors a customer of Minnesota Mining?

A. General Motors is a customer of Minnesota Mining.

Q. Are they a fairly large customer?

A. Yes, they are.

Q. Will you state whether or not General Motors buys from Minnesota Mining adhesives?

A. They do, yes.

Q. Will you please state the nature of the adhesives that General Motors buys from you?

A. They buy several kinds, and we group our adhesives into two categories, one which we call adhesives as such; and the other as sealers. Now, the adhesives are used for [fol. 6943] applying or attaching felt or sound deadener, rubber weather stripping, and making fast and adhering the rubber around the windshields and so-called rear lights, and also for adhering fabric, trim materials.

Q. Do you know whether or not in 1946, 1947, and part of 1948 du Pont manufactured adhesives used in automobile manufacturing?

A. I believe they did, sir.

Q. As to your knowledge and belief, what do they manufacture and what use was it put to?

A. Well, they produced "Neoprene" base adhesives.

Q. Do you know what General Motors used "Neoprene" base adhesives for, if it used them?

A. Well, they used them primarily for attaching rubber weather strips, or the rubber around what they refer to as a deck lid of automobile bodies.

Q. And what is the deck lid, sir?

A. That is the lid of that part which closes the trunk compartment.

Q. What, if you know, did General Motors use the adhesives sold to it by Minnesota Mining, for, in the years 1946, 1947 and 1948?

A. They used adhesives for attaching fabric and for sound deadener or attaching or windshield rubbers and weather stripping.

Q. Can you say from your knowledge of the business, Mr. Weyand, what percentage approximately of use in an automobile that the du Pont adhesives were used?

Mr. Cox: I object to that question.

Mr. Harris: Let me reframe it.

By Mr. Harris:

Q. What percentage of the automobile structure is covered [fol. 6944] by weather stripping, and what do you call that back lid?

A. Deck lid.

Q. Deck lid, for which you say the du Pont adhesive was used?

Mr. Cox: I still object to the form of the question.

The Court: Well, sustained. I don't know how the witness can answer that unless he is an expert in the construction of automobiles.

By Mr. Harris:

Q. Well, you know, do you not, the use to which these adhesives are put?

A. Yes, sir, I do.

Q. You know, do you, how much of the car, the ordinary car, the ordinary automobile, your adhesives are used in? By that I mean in terms of percentage, these various parts that you have spoken about.

Mr. Cox: Percentage of what?

By Mr. Harris:

Q. (Continuing) Of the surface of the car, and the parts to which the adhesives would apply.

A. I am afraid, sir, that is a difficult question. It would be hard for me to answer that.

The Court: I think what you want to know is what part of the car the adhesives are used on.

By Mr. Harris:

Q. Well, you can state that. What parts of the car? I thought you had done so.

A. Yes, I had. For attaching trim to metal, to attach the felt pads to the roof, and to the floor, and to the deck lid—[fol. 6945] I refer to that again—and also for attaching rubber to the doors of the deck lids and for sealing the windshield rubbers and the rear lid rubber.

Q. Now, what percentage of the entire car to which adhesives are applied, is that? That is, is it the entire adhesive application, or is it the application, less the parts put in by du Pont? Can you tell me?

A. I am afraid I am confused at that question, Mr. Harris.

Q. You have stated, I believe, Mr. Weyand, that the "Neoprene" adhesive manufactured by du Pont is used only for the weatherstripping and for the deck lid.

A. To the best of my knowledge, that's right.

Q. Now, what percentage of the entire use of adhesives is that?

A. Oh, well, now, the weatherstripping adhesive is made with "Neoprene" base, irrespective of the maker, and I estimated between five and ten per cent of the total adhesives used in the car.

Q. That's right. Does that include the deck lid?

A. That includes the deck lid.

Mr. Harris: Take the witness. No further direct.

Cross-examination.

By Mr. Cox:

Q. Mr. Weyand, I represent the du Pont Company in this litigation.

A. Oh, yes.

Q. My name is Cox. I should like to ask you two or three questions about your last testimony.

This last estimate that you gave us of five or ten per cent, are you speaking of five or ten per cent of the body volume of that adhesive, or of their dollar value, or just what was it?

A. I am speaking of the gallonage.

[fol. 6946]. Q. The gallonage?

A. Yes.

Q. Are these "Neoprene" adhesives more expensive than other adhesives?

A. Yes, they are.

Q. If you expressed the percentage of relationship in terms of the dollar value of the adhesives that went into a car, would the percentage relationship between the "Neoprene" adhesive and the balance be greater or less than five or ten per cent?

A. The ratio would be two and a half or three to one in the price over the ordinary, what we call "Reclaimed Rubber Adhesives."

Q. So that your percentage represented by the dollar value or cost of the adhesives would be larger?

A. Would be larger.

Q. Mr. Weyand, in preparation for your testimony in this case, did you examine the du Pont product book, or anything of that kind?

A. No, sir.

Q. You have testified that du Pont makes "Neoprene" adhesive?

A. That's right.

Q. And that your company also makes that?

A. Yes, sir.

Q. What kind of an adhesive is used to attach the rubber around the windshield of the car?

A. For the most part a reclaimed rubber base resin solvent adhesive.

Q. You do not know of your own knowledge whether a "Neoprene" adhesive has ever been used by any car manufacturer for that purpose?

A. That is right.

Q. You are not prepared to say it was not?

A. I am not prepared to say that.

Q. Do you know of your own knowledge whether in 1946 and 1947 the du Pont Company made and sold any adhesive [fol. 6947] sives made of reclaimed rubber that was used on windshields?

A. I have never seen it.

Q. You don't. Are you certain they did not make them?

A. I would not know that they did not make it, but I have never seen any.

Q. What kind of adhesives is used ordinarily, Mr. Weyand, to cement silencer pads and trim materials to the body of a car?

A. A water disperse type with a base of reclaimed rubber.

Q. Does your company make that?

A. Yes.

Q. Do you know of your own knowledge whether in 1946 and 1947 du Pont Company made a product that was also used commercially for that purpose?

A. I do not know.

Q. Have you ever heard of "Fairprene" cement being used. Have you ever heard of a product called "Fairprene" cement?

A. Yes.

Q. Have you heard of that product being used for this purpose, that is to cement the silencer pads and trim materials to the body?

A. No.

Q. Are you prepared to say it has never been used for that purpose commercially?

A. I have never seen it used for that. I would prefer to say it that way.

Q. If I suggested to you that it had been used commercially for that purpose, would you be prepared to deny that?

A. No, sir, I have never seen it.

Q. What do you know of your own knowledge, Mr. Weyand, about the products of the Chrysler Company, that they use for adhesives?

A. Well, the Chrysler Company at one time purchased their adhesives from adhesive manufacturers, and several years ago they started producing their own adhesives in their own adhesive plants.

[fol. 6948] Q. Have you ever personally sold adhesives to them?

A. Yes.

Q. In recent years?

A. No, some years ago.

Q. In 1946 or '47 were you selling adhesives to them?

A. Well, I was the manager of the Adhesive Division at that time.

Q. But did you sell adhesives to Chrysler at that time?

A. Yes, but I couldn't tell you in what quantity.

Q. Did you personally have any knowledge as to what kind of adhesives Chrysler was using in 1946 and 1947?

A. Yes, they used chiefly reclaimed rubber base adhesives.

The Court: The Court stands recessed for fifteen minutes.

(Short recess taken.)

Mr. Cox: Mr. Weyand, I have just two or three more questions and we will be finished.

By Mr. Cox:

Q. You testified that du Pont makes and sells some adhesives that are made of "Neoprene". Are you aware that the du Pont Company also makes and sells adhesives that use as a base some other synthetic rubber?

A. I am not familiar with the Fairfield or du Pont line of adhesives beyond the "Neoprene" adhesive.

Q. Does that mean that you have never heard of the du Pont rubber sealing compound that has an asphalt base? [fol. 6949] You never heard of that?

A. I don't believe I ever heard of it, sir.

Q. You are not aware that that is an adhesive that is offered for use in sealing tops in windshields? You have never heard of that?

A. No, sir.

Q. Have you ever heard of a commodity sold by the du Pont Company that is sold under the name "Fairprene Cement" and has an asphalt and rubber base?

A. I wouldn't know the ingredients. I know of the "Fairprene" cements by name.

Q. Did you include that in your general description of the adhesives made of "Neoprene," or were you—

A. Well, "Fairprene" as I knew the name, was a trade name covering their adhesives, and the ingredients of the adhesives depended upon the composition or formula.

Q. And you didn't know anything about the formula?

A. No, sir.

Mr. Cox: That is all.

Mr. Harris: No redirect, your Honor.

(Witness excused.)

Mr. Hoyt: The Government now calls Edwin W. Farmer as a witness.

If the Court please, Mr. Farmer will testify in regard to Government's Exhibits 1343-A to 1344, on the subject of solvents as it appears under the sub-heading "Finishes" [fol. 6950] on Government's Exhibit 1343-A, acetylated solvents on Government's Exhibit 1344.

EDWIN W. FARMER, called as a witness in rebuttal on behalf of the Government, having been first duly sworn on his oath, was examined and testified as follows:

Direct Examination. ?

By Mr. Hoyt:

Q. Will you state your name, please?

A. Edwin W. Farmer, F-a-r-m-e-r.

Q. Where do you live, Mr. Farmer?

A. Detroit.

Q. What is your present position?

A. Treasurer and assistant general manager of Dibble Color Company.

Q. How long have you been associated with the Dibble Color Company?

A. Twenty-one years.

Q. Will you give a brief resume of the various positions you held in that company?

A. Well, I have been assistant general manager most of that time, and treasurer for the last few years.

Q. What products does the Dibble Color manufacture?

A. Inks, lacquer, enamels, undercoatings, lacquer thinners.

Q. Did they manufacture any solvents for use in mixing with paint or as thinners?

A. We do not manufacture any solvents.

Q. Does your company have any connection with some [fol. 6951] other company?

A. We are a subsidiary of Pratt & Lambert, Incorporated, Buffalo, New York.

Q. Are you familiar with the products manufactured by Pratt & Lambert?

A. Fairly familiar with them.

Q. Do you know whether Pratt & Lambert make solvents?

A. They do not manufacture solvents.

Q. You mention lacquer thinners. Is there more than one type of lacquer thinner?

A. Oh, yes.

Q. Would you describe the principal types, please?

A. Well, thinking of it as it pertains to Detroit, there are lacquer thinners for use in automobile lacquers. That would be for spraying, principally. If it is for dipping, there would be dipping lacquer thinners, or for some other purpose. It may be for metal or for wood.

Q. Can lacquer thinner be used to thin enamel?

A. Well, I didn't get the question.

Q. Can lacquer thinner be used to thin enamel?

A. Well, you would be sticking your neck out if you tried it.

Q. Now, do you know which automobile manufacturers use lacquer on their cars as against those which use enamel?

A. General Motors use lacquer, Packard, Hudson. There may be some others who use it.

Q. What are the ingredients of a lacquer thinner?

A. Customarily they are composed of ethyl acetate, butyl acetate, or amyl acetate, or a similar solvent, and aromatic hydrocarbons, such as toluene.

Q. What proportion of the lacquer thinner consists of [fol. 6952] solvents?

A. Of solvents? Oh, usually forty to fifty percent.

Q. Where does your company or companies purchase your solvents that you use in your thinner?

A. Carbide & Carbon Chemical Company, Commercial Solvents, U. S. Industrial Chemicals, and Shell Chemical.

Q. Will you name some of the other principal manufacturers of such solvents, if you know, or if there are any?

A. Well, I think I have named the principal ones. We are contacted by the larger ones, and they are the ones I have just named.

Q. Did you ever hear of acetylated solvents?

A. I have heard of it, but I am not familiar with it.

Q. What type of solvents, if you know, does the du Pont Company make?

A. We have not been contacted by any salesman for du Pont on solvents for fifteen or twenty years.

Q. Are you concerned with the purchasing of these solvents?

A. I supervise it.

Q. Does du Pont solicit your business on other products?

A. They do on pigments and on nitrocellulose and a few other items for plastic.

Q. Do you purchase products from them?

A. We do.

Q. Do their salesmen call on you regularly?

A. They do.

Q. Did you ever see any solvent made by the du Pont [fols. 6953-6955] Company?

A. I worked for du Pont when they were making ethyl acetate.

Q. When was that?

A. About 1917 to 1923.

Q. Has any salesman of the du Pont Company in recent years, specifically 1946 and 1947, ever shown you or attempted to sell you any du Pont solvent?

A. No.

Q. Have you been in the market for solvents during all that period?

A. Yes, we have.

Q. Could a solvent be used as a lacquer thinner alone without being mixed with other products?

A. It could be, but it does not stand to reason that it would be.

Q. What would that reason be?

A. The cost.

Q. Do you know how much lacquer thinner a company needs in proportion to the amount of lacquer that it needs in finishing automobiles?

A. Customarily a gallon of lacquer enamel for an automobile is reduced with at least one gallon of lacquer thinner for spray application.

Mr. Hoyt: You may cross-examine.

Mr. Cox: May I have the Court's indulgence?

No cross-examination, your Honor.

The Court: You are excused.

(Witness excused.)

Mr. Harsha: That completes our presentation for today, your Honor. We are running a little ahead of schedule. Our other witnesses will not be ready until tomorrow. [fol. 6956] The Court: Proceed.

Mr. Harsha: The Government calls as its witness Mr. T. A. Nalle.

Will you take the stand, please?

THOMAS A. NALLE, called as a witness on behalf of the Government, in rebuttal, having been first duly sworn, was examined and testified as follows:

Mr. Harsha: May it please the Court, the purpose of the examination of this witness is to inquire into and develop certain facts regarding a number of documents which have been returned by the du Pont Company pursuant to the recent subpoena calling for trade reports. They deal with the subject matter of fabrics.

We have given your Honor a list of the documents to which we will refer during the examination.

Direct Examination.

By Mr. Harsha:

Q. Will you state your full name, Mr. Nalle, please?

A. Thomas A. Nalle.

Q. Where do you live?

A. Wayne, Pennsylvania.

Q. By whom are you employed, Mr. Nalle?

A. I am employed by the Fabrics Division of the du Pont Company at Philadelphia.

Q. How long have you been in the employment of the du Pont Company?

A. I started with du Pont March 11, 1915.

[fol. 6957] Q. Was that with what was the forerunner of the Fabrics Division?

A. No, sir, I first went to work at the experimental station just out of Wilmington as a chemist. I went to work on a development process there, and in September I was sent to the Newburgh plant at Newburgh, New York,—

Q. Is that September of 1915?

A. 1915—to put this process on a production basis. I worked on that until May 11, 1917, at which time I went into the service.

I returned to the company sometime in 1919, and sometime during 1920 I was laid off for lack of work. I came back to the company in 1924, I don't remember the exact date, and I have been with them continuously since that time.

Q. When you returned to the company in 1924, what position did you obtain?

A. To the best of my recollection, I was an assistant supervisor in one of the production areas for probably six or eight months. Then I was put in charge of handling complaints, representing both the production and the sales departments.

Q. Where were you located at that time?

A. I was located at the Newburgh office. About 1927 I was sent to the Fairfield plant where an office sales organization was being organized.

I stayed there approximately three years and returned to Newburgh office on similar work until 1933.

In 1933 I was assigned to the Philadelphia sales territory as sales representative in that area. I worked there until August, I think it was, 1936, when I was transferred to the Detroit office.

I continued at Detroit until August 1st, 1949 when I was [fol. 6958] again assigned to the Philadelphia office as sales representative where I am now employed.

Q. Approximately what year would you say that you became acquainted with the sales work as opposed to the development or research work that you did?

A. I would say in sales office work in the late '20's, or early '30's, and with the field work when I went to Philadelphia in 1933.

Q. When you were working in the sales office work as opposed to the field, were you there dealing with reports being sent in from the field by the salesmen of the Fabrics Division?

A. To some extent. I handled the general range of office work, correspondence with the salesmen, correspondence with the customers, and just general supervision of the interior work.

Q. Then you became an active salesman in the field beginning in about 1936, is that correct?

A. In 1933 at Philadelphia, and in 1936 at Detroit.

Q. When did you first engage in sales work in the Fabrics Division with regard to the automobile companies, if you did?

A. You refer now, sir, to sales contacts?

Q. Yes.

A. In 1936, except for a little automotive business there might have been in the Philadelphia territory, which was very little.

Q. You didn't do much automotive work out of the Philadelphia office?

A. No.

Q. That was all handled primarily out of the Detroit office, is that right?

A. There was practically none there. There were just Mack Truck and one or two other very small companies.

[fol. 6959] Q. When did you first call on any division of the General Motors Company, if you did?

A. I would guess that probably my office work took me to see some of these accounts in the late 20's, not as a salesman but as a man from the office to check into certain details that we might have been working on at the time.

Q. Did you at a later date become active in the solicitation of the fabrics business of any of the General Motors divisions?

A. I did, sir, in 1936.

Q. Beginning in 1936?

A. Beginning August, 1936, as I recall it.

Q. Were you engaged continuously in sales contact work from 1936 on until 1949?

A. Yes, sir.

Q. Were you during that period of time, active in soliciting the business of various divisions of General Motors?

A. Yes, sir.

Q. What types of customers did you solicit during this period, say, from 1936 to 1949?

A. I solicited anyone in the Detroit territory who was a potential customer for the production which we manufactured, both automotive and non-automotive customers.

Q. What products were you attempting to sell to the automotive industry during this period?

A. We were attempting to sell a complete line of products made by the Fabrics Division.

Q. Would that include the products produced both by the Newburgh plant and the Fairfield plant?

A. It did, sir.

Q. Did you attempt to sell all of the products that were produced by that entire division?

A. All that—I should perhaps qualify that. All that fell in the so-called industrial group. We had other men [fol. 6960] in the same territory selling, for example, "Tontine" window shade material which went into an entirely different field.

Q. Did you sell or attempt to sell fabrics used for purposes other than upholstery or automobile trim?

A. Yes, sir.

Q. You did, sir? I am speaking now in regard to your solicitation of automobile customers.

A. Anyone who used any type of fabrics was always considered a potential customer, and we were supposed to keep in contact with them.

Q. At the beginning of this period, which started I believe you said 1936, when you went out to the Detroit office?

A. Yes.

Q. About how often on an average would you contact the various divisions of General Motors Company?

A. Well, that depended largely on circumstances as to the requirement at that particular time. In some cases I might see them several times a week. Others, there might be lapses of several weeks.

Q. Would it be fair to say that you might make 15 or 20 calls a year on a particular division of General Motors?

A. Yes, I think so in general, and in some cases more than that.

Q. Now, after you made one of these calls was it your practice to make any kind of written report?

A. Not always, no, sir. Occasionally we made a trade report. I think those were confined to the master trade reports and occasionally a quarterly report, which were just routine matters.

[fol. 6961] Q. Now, you refer to the master trade report. When did you start making those, do you recall?

A. As I recall, we started what is approximately the current form; it was supposed to be made of the last quarter of 1946.

Q. Was this the report that showed the estimates of the consumption of fabrics by that particular customer with an estimate as to the amount of business to be obtained by the du Pont Company, your company, as opposed to all of its competitors?

A. By no means, no, sir.

Q. What did that report contain?

A. Well, first of all, my job was selling, and we kept, we made what reports we were required to, and I put into that report only the information which I felt reasonably sure was correct. If I was not certain about it, I left it out. In that way there was quite a bit of material which does not show.

For example, if we and several others might be supplying a customer a parallel line of products, I was able to get a very good idea, I thought, of what we were selling, and

of what those principal competitors were also selling, and that was the basis of those reports.

Q. Do I understand you to mean your report would show the estimated sales by du Pont and competitors of du Pont of products which were approximately comparable?

A. No, those reports showed only the major suppliers. For example, there were four—shall I take the example of Fisher Body?

Q. You pick your own example.

A. Well, there were four major suppliers of more or less parallel products. There was du Pont, the J. C. Haartz Company, Textileather and Federa leather. With the exception of Haartz, during the forties, right after the war, the first two or three years, I was able to get what I [fol. 6962] thought was a fairly definite picture so those were the basis for my reports, and I would guess that my report—understand, my reports were in yardage, not in dollars—might have covered perhaps 65 to 75 percent of the total requirements.

Q. You say your record would cover sixty-five to seventy-five percent of the total requirements of the customer?

A. Total usage of the customer of coated fabrics.

Q. What would account for leaving out the other 25 percent, roughly?

A. Well, I was never a statistician. My job was selling, and the bulk of the business, maybe 75 percent, was from these four suppliers. There might have been a dozen others.

Q. Smaller supplies, you mean?

A. Some small and some large, but if I didn't have reasonable assurance as to what my figures were, I always followed the practice of leaving them out and my home office knew that and understood how the report was made.

Q. But I gather that you attempted to make your estimates as accurate as it was within your power at that particular time?

A. To the extent of the supply sources shown. The so-

called fringe accounts, I just simply followed the policy of not including them.

Q. The fringe accounts, you say?

A. Probably a dozen or fifteen other accounts who might have been supplying some today and some at various times.

Q. You would not leave out any major supplier, to the best of your ability?

A. I could, yes. I am sure I did.

Q. Was that your practice?

A. For instance, for a couple of years there I did not show the Haartz Company in those consumption figures [fol. 6963] at the right-hand column of the trade report for the simple reason that Fisher at that time was not interested in having us supply the material which Haartz supplied. We had the material available and we contacted them regularly about the possibility of supplying it, but since we were not sharing in that business, I didn't at that time include it on the report.

Q. From what sources did you obtain your estimates of the yardage figures which you put into your report?

A. Well, for our own figures I would use an estimate of what I knew to be our own sales in yards and from schedules of accounts we were supplying, from information I picked up from the engineers and specification men, scheduling men, and so forth, I was able to develop what I thought was a fairly representative picture of the consumption of the parallel products which we were at that time furnishing.

Q. Would you ask the scheduling personnel of the particular customer the amounts that they were buying from one of your competitors?

A. No, I wouldn't ask him directly because they didn't like to be asked such information. I would usually engage him in conversation. I might talk to one man about one thing and another man about another phase of it, and in that way I could form a pretty good picture of what was coming from whom.

Q. You mean by "piecing together" details that you had picked out from a number of conversations?

A. That is right. You see, we and two other suppliers might be supplying the same item at the same time, and when a model was going into production sometimes we would say No. 3 would submit samples which would be selected, or No. 2 and No. 1. I am using numbers rather [fol. 6964] than names of companies.

I would be given some of their samples to match because they wanted us to supply some of that same color, maybe in that weight or in another construction, and in the same way they might select one of our numbers, and they would have other people match that.

Q. Will you show Mr. Nalle Government's Exhibit No. 1358, please?

Is Government's Exhibit No. 1358, Mr. Nalle, a report prepared by you?

A. Yes, sir.

Q. Is this a so-called master trade report? This, you will note, is dated "date of call, October 16, 1939."

A. Yes. That was considered a master report, and you will notice the form of this is—yes; this was a master report but we used the same form for routine reports.

Q. Routine reports also?

A. Yes, leaving out the consumption figures.

Q. Now, approximately how long have you prepared master trade reports on this type of form? I see this is dated 1939.

Had you used it from the time that you went out to the Detroit office?

A. I would say that this form was instituted about 1938, to the best of my knowledge. I am not definitely sure.

Q. Did you make reports prior to 1938 which would also set out the estimated consumption figures?

A. Set them out, yes, with the limitation which I have previously explained.

Q. How long had you prepared reports such as that?

A. As I recall, I must have prepared some—you are speaking in the automotive field now? I must have prepared some of those possibly in the fall of 1936.

[fol. 6965] Q. Now, during the period prior to the time that you went out to Detroit, when you said you were engaged in sales office work, I believe, in Philadelphia, did you at that time see reports similar in nature from your salesmen in the field, which gave estimates of the customers' consumption?

A. I think I must have.

Q. And would that be during the period, say, from 1933 to 1936?

A. No, sir. I was a salesman myself in the field in 1933 to 1936. I was making up these things.

Q. This would be the period prior to 1933, is that correct?

A. Yes, sir.

Q. Going back into the 1920's?

A. Well, the late 20's, yes, sir.

Q. Now, do you make a copy or receive a copy of these master reports, irrespective of the form, but I mean where you have the customer's estimated consumption, do you keep copies for yourself?

A. Well, to this extent: Those copies were typed in the Detroit. We sent the necessary copies to the home office, and kept one for our files.

Q. When you say "our files," do you mean—

A. I mean the Detroit office files.

Q. The Detroit office files?

A. Yes, sir.

Q. And do you know how far back they keep these reports showing estimated consumption?

A. I have no idea.

Q. Have you checked that at all recently?

A. No, sir.

Q. Do you know what the practice is with regard to the maintenance of documents in the Detroit office?

A. Well, the headquarters in the last fifteen or twenty years have moved several times, and I don't know what the practice is. I have no idea.

Q. Now, turning to this report which you prepared in [fol. 6966] 1939, I see it concerns the Chevrolet Commercial Body Division located in Indianapolis, Indiana.

I note that the upper part of the report which is headed "Consumption—Pyroxylin Coated Goods—Next Twelve Months" has been left empty.

Does that mean at that particular time Chevrolet Commercial Body Division was not purchasing pyroxylin coated fabrics?

A. Yes, sir.

Q. And then I note that the next is "Consumption—Rubber-coated Goods—Next Twelve Months."

Now, judging from the date of this report which is 10-16-39, can you tell us what period of time these figures that you have indicated refer to?

A. It is a little difficult to recall just what was done fourteen years ago, but I would assume from the heading of this report that it covered the period from October to October roughly.

Q. You mean this is a projection for the ensuing year, 1940?

A. Yes, sir, based on the estimates which could be made at that time.

Q. Now, turning to the first item that you have indicated there under the heading, "Quality," "6130," width, 50 inch, and under "Price" the notation "Contract," then the "Manufacturer," du Pont, and then the initials "D. S."

Can you explain what those designations mean?

A. Starting with the "Quality" designations?

Q. Yes.

A. That code number represented a construction of fabric with a coating bringing it up to a given weight, in that case 30 ounces to the lineal yard.

Q. The "30" at the end of the last two digits?

A. The first two digits indicate the type of fabric, and the last two digits indicate the weight that that particular [fol. 6967] type of product is.

Q. And the "30", I assume, indicates the width?

A. That was the width of the yard.

Q. And what does the indication "Contract" refer to?

A. Well, Chevrolet followed the practice of buying against contracts, a contract covering a period of time and—

Q. Now, what does the abbreviation "D.S." refer to?

A. Direct sales.

Q. Not handled through a distributor or intermediary, is that correct?

A. That is right, sir.

Q. "400,000" refers to what?

A. To my estimate of their probable requirements of that particular item.

Q. That would be supplied by du Pont?

A. By du Pont.

Q. Now, taking the next item, the quality of which is Reddo, and so forth. Now, is that a reference to a fabric produced by Chase which is comparable?

A. That's right, sir.

Q. Is that supposed to be comparable to the preceding item produced by du Pont?

A. That is comparable in all respects. The color might have been different; I cannot recall.

Q. Now, the next item I notice is headed; "Headlining 50" Drill."

Is that a different usage of fabric?

A. Yes, sir, that is used in the top of a small number of the bodies to cover up the bows in the unfinished section

[fol. 6968] up in there. It is stretched from front to rear and the top of the body—in some few of the bodies.

Q. And is that a fabric different in some fashion from the preceding two items that you listed there?

A. It is different in weight, yes, sir—weight and general construction of the fabric.

Q. I assume that you made a headlining drill at that time, at the du Pont Company?

A. Oh, yes.

Q. Now, opposite that I see, on the right-hand side, there is the item "Headlining Sheeting."

Can you tell me what the purpose of that fabric is? That is, what it is used for.

A. Well, it serves the same general purpose as the thousand yard item mentioned on the opposite side. In other words, it is used in the interior of the body to cover up the unfinished section of the top. It is a very light-weight material having very little coating and as I recall that is put in there and then is subsequently sprayed with paint.

Q. Now, how about the curtain material, the next item? What is that?

A. The curtain material was used on a type of open delivery body. In other words, some might be old buggy curtains, when the weather was good you would roll them up on the sides and on the back.

Q. Now, directing your attention to the comments on this document, No. 1, which reads: "Landers supplies a very cheap sheeting which is entirely satisfactory. Also were low on curtain stock. Chase were lower than we were on the recent olive drab inquiry. We were third. In addition to Chase, Landers were low. I do not believe Cotan, now represented by Mr. Scott, formerly with Chase, was seriously considered."

[fol. 6969] On the basis of comments contained therein, can you tell us, Mr. Nalle, whether at that time that you made the report, these comments referred to the prices being quoted for the following year's business?

A. Not necessarily for the entire year. They were perhaps for a contract period which might have been for a period starting in October or December, I cannot recall the exact period; but I am rather certain it was not for a period to exceed six months.

Q. What was the custom of the Purchasing Department of Chevrolet Commercial Body at this time, if you recall, as to the duration of the contracts which they let for fabrics?

A. In 1939—my recollection is that it would probably be six months.

Q. And when would they normally ask for quotations and let and finally make the award of the contract?

A. Oh, on that basis, sir, I think it would be in the fall, maybe October or November, and the next one approximately six months later. It might vary a few months either way.

Q. Now, during this period of 1939 were you also calling on other divisions of General Motors that were consumers of fabrics?

A. Yes, sir.

Q. And were you making reports similar to the one you have there in your hand for those divisions?

A. I cannot say whether I was or not. I don't know.

Q. Well, wasn't that the general practice, though, to make reports?

A. It was, but I don't remember having any particular report. It was the general practice.

Q. It was your general practice, but you cannot remember any specific report, is that what you mean?

A. That's right.

[fol. 6970] Q. Now, after you had made a report which gave your estimates of the anticipated annual consumption of a division of General Motors, such as are indicated in this document, you have before you, Government's Exhibit No. 1358, was it your practice at a subsequent period, to check your estimates against the actual sales by du Pont for that period to see how closely they corresponded?

A. No, sir.

Q. Weren't you interested ever to find out whether your estimates were accurate?

A. I might have when the time came to make the next report.

Q. Pardon?

A. I say I might have checked them when the time came around to make up the next or succeeding report.

Q. It would have a bearing on what would be your estimate the succeeding year, would it not?

A. I would naturally see whether I had been right or wrong, but once the trade consumption figures were written, they were more or less forgotten by me.

Q. But I gather you might have reviewed them the following year in making up your next—

A. I might have reviewed them in making up the following year, yes, sir.

Mr. Harsha: Would you show Mr. Nalle Government's Exhibit No. 1349, please.

By Mr. Harsha:

Q. Now, is this what you have described in your testimony as being the more or less current master trade form report?

A. Yes, sir.

Q. This is one you made with respect to Fisher Body, Division of General Motors, date of—date of call—

A. May I modify that "Yes, sir"?

[fol. 6971] Q. Certainly.

A. It was current for perhaps two or three years. As I recall at present we have a slightly different form.

Q. Is the format approximately the same?

A. The consumption figures, and so forth, would be. The other requested information has been revised to some extent.

Q. Now, this is a report which you made following a call, or following, I might say, two calls, one dated November 29th and the other December 6th, 1946.

Based upon your practice, and with reference to the date of your visits, can you tell us what period of time is referred to in your estimates that are shown here?

A. This is the report which was made out in the fourth quarter, and it is based on purchases made for that calendar year to the date of the report.

Q. So that this is not one of the type where you are projecting for the following year?

A. This is the current year.

Q. This is the current year, 1946, is that correct?

A. Yes, sir.

Q. And the only projection that is contained in this report would be for that month or some of the unexpired year?

A. That is right.

Q. Now, drawing your attention to the fact that there is nothing indicated under the columns, "Rubber coated fabrics," in the middle of the page—do you see that?

A. Yes.

Q. Is that an indication that at that time the Fisher Body was not consuming rubber fabrics?

A. No, sir, it is not.

Q. What is it?

A. It meant that I didn't have information which I felt [fol. 6972] was sufficiently accurate to justify including any other items.

Q. Now, did you have any fashion by which you informed the home office, whereby they could distinguish between an omission under one of these types of products to indicate that the consumer was not buying that type of fabric, as opposed to the situation where you felt you didn't have sufficient information?

A. Would you repeat that question, please?

Mr. Harsha: Will you read the question?

(Question read.)

By the Witness:

A. By that, sir, do you mean did we have a regular form where we report omissions or corrections?

By Mr. Harsha:

Q. No, I meant from the way you make up your master report. How would a person in the home office know whether you merely didn't have adequate information concerning a type of fabric to include it in your master report?

A. Well, we were in constant communication by telephone. I would visit the home office frequently, and we would go over these reports, and they understood thoroughly—it was always understood that I was simply reporting on the products, paralleling those in which we were in full production for that customer at that time. I didn't try to go out and rummage up and down, and do a little detective work, and try to find every yard of every fabric of the type they were using.

Q. No, But I assume from this report it is true that du Pont was not selling rubber fabrics, at least to Fisher [fol. 6973] Body, at that time?

A. Yes, it does not mean we weren't trying to sell them.

Q. It might also mean that they just weren't buying rubber fabrics from anyone, isn't that true?

A. Not necessarily.

Q. Couldn't that be the case?

A. It could be, but it is not probable.

Q. As a matter of fact, isn't it true that Fisher Body in this period after the war consumed very little in the way of rubber fabrics?

A. I still don't know.

Q. You don't know what Fisher was consuming in the way of fabrics after the Second World War?

A. I don't know all of their fabrics, no, sir. I know, if you include top materials, I know that they were consuming large quantities of convertible top material which we call "Teal", and which, in general categories, might be called a rubber fabric.

Q. A rubber fabric?

A. It has rubber in it.

Q. Don't you usually refer to your "Teal" as a combined fabric, sir?

A. Yes, we do, but some people might consider it as a rubber fabric. It wouldn't be classed as a rubber coated fabric, if that is what you mean.

Q. And that is what this particular box on your report refers to, isn't it, "Rubber coated fabrics"?

A. Yes.

Q. Now, you have another heading in this report entitled "Resin coated fabrics & sheet stock." What type of fabric does that cover that is made by du Pont? Is that the vinyl?

A. That is the vinyl material, sir.

Q. Now, referring back to the pyroxylin coated fabric at the top of the report, am I correct that the items in [fol. 6974] dicated as "6950-50" "for du Pont—do you see that, the first item?

A. Yes, sir.

Q. Is that a comparable item to the Broken Twills listed for Textileather?

A. It is.

Q. Then it also applies, I assume, for the same Broken Twills supplied by Federal?

A. It would, sir.

Q. And then with respect to the next, which is "4000-4500-4502". Does that correspond to an item listed under Textileather?

A. That would correspond to the sateens in both cases.

Q. And the last item under the du Pont listing, "2251-55" & "58," does that correspond to the drills listed for Textileather?

A. It does.

Q. Do you recall whether the year 1946 was a year of rapidly expanding production on the part of Fisher Body?

A. It very definitely was. Beginning their post war production, I believe a few cars were made in 1945, but I am not certain.

Q. Did that rapid expansion, do you recall, also occur at the very end of the year after this report was made?

A. Automotive production figures would show that, but my recollection is that it did, based on the availability, or controlled, I should say, by the availability of raw materials. In our industry it was a period of great scarcity.

Q. Great scarcity in fabrics?

A. Of fabrics for producing these items.

Q. Do you mean by that that you didn't have great difficulty in that year in selling fabrics to the automobile industry?

A. All you had to do was tell someone you had it.

[fol. 6975] Q. And they would buy it?

A. They would buy it.

Q. Now, if you turn to the back of the page, of this exhibit, Mr. Nalle, you see the statement appears, where you state that:

"The consumption figures shown on the other side of this sheet are based on the production of 700,000 passenger cars in 1946 and the usage of 1.6 yards per car."

Do you recall from whom you obtained your estimate on the car production? Would you have gotten that from somebody in Fisher Body?

A. No, sir, I am quite certain that those were published figures representing what that manufacturer would get out during that year.

Q. Well, wouldn't you check those with the purchasing people in the Fisher Body to see whether the published figures were off or not?

A. No, I had a great deal of confidence in the published figures. They were "Ward's Automotive Reports" and so on.

Q. And these figures indicated here for pyroxylin coated fabrics were the du Pont figures based upon what had been the du Pont actual sales during the earlier part of 1946?

A. Well, I state there, sir, "Since post-war production was resumed, we have received orders totaling 2,760,000

yards. This amount is broken down as follows:"—into those qualities.

Q. Yes. I think I didn't make myself quite clear, Mr. Nalle. I pulled a switch on you. I was going back to the first page of this document as to your estimates on pyroxylin coated fabrics, and I wondered whether your yardage figures shown there for du Pont had been largely based upon your knowledge of actual orders already [fol. 6976] placed during that year with du Pont.

A. Based largely on that, yes, sir.

Q. And the other figures for Textileather and Federal, had these been attached previously, as you described?

A. That was used in arriving at our figure, but I made it my business to try to find out, at least.

Q. To what?

A. I made it my business to try to find out about how many yards of each different construction were used of these particular fabrics, were used in an automobile body, and that is the way I arrived at that figure of 1.6.

Q. Now, will you show Mr. Nalle du Pont Exhibit No. 289, please. Would you keep that same exhibit that you just had?

A. Yes.

Q. This is an exhibit which has been introduced by the defense, Mr. Nalle, and it showed the actual sales made by the du Pont Company in yards of coated and combined fabrics to the Fisher Body Company during the years 1923 to 1949.

I should like to direct your attention to the year 1946, which is the same year covered by your master trade report that we have just been discussing, namely, Government Exhibit No. 1349.

If you will look in the third column of this du Pont exhibit, you will note total du Pont sales—do you see that?

A. Yes, sir, 1,211,100.

Q. That is correct. That apparently is the actual yardage sales made by du Pont to all units of General Motors—rather, to Fisher Body during that particular year.

You will note that opposite that there is a figure 805,000, [fol. 6977] roughly, which is the number of automobile bodies manufactured by Fisher that year.

Comparing that with the estimate given in your master trade report, which was 700,000 cars, do you have an explanation as to why you were off 100,000 for the car production for that year?

A. My only explanation is that my report, the year still had a month to go, and my 700,000 figure was apparently taken from the published information that that is what they expected to build. Further than that, I cannot explain it.

Q. Is it possible in the last month of this year, 1946, that production was far in excess of that which had previously been estimated?

A. I don't know. I don't remember the production curve at that time, whether it was flat or whether it went up.

Q. It was a period of rapid expansion, was it not?

A. It was, but the rate of expansion I couldn't possibly recall.

Q. You also note—I believe my arithmetic is correct—that if you total the items that you have shown on Exhibit 1349 shown opposite du Pont, the total yardage would amount to 870,000 yards. That is combining the pyroxylin and the resin coated fabrics?

A. On the trade report?

Q. Yes, on the trade report, 810,000 yards, I believe, and you will note that du Pont Exhibit shows du Pont's actual sales amounted to 1,211,000 yards for that particular year.

Would the discrepancy between your estimate and the actual sales by du Pont also be attributable to this rapid expansion of car production in the very last part of the year?

Mr. Cox: What do you mean also?

[fol. 6978] Mr. Harsha: In reference to his estimate also on the car production.

I will strike the also, Mr. Cox.

The Witness: Would you repeat the question?

Mr. Harsha: Repeat the question, please.

(Question read.)

The Witness: You are calling attention to the discrepancy of 800,000 against 1,211,000?

Q. That is correct, sir.

A. I would not say that the expansion was that rapid. I would say that I hadn't checked my shipments with complete accuracy as to the total sales for that period, up to approximately December 1st.

Q. I gather from your answer that it is clear that du Pont sold more fabrics than you had estimated on your master trade report in November of 1946, is that correct? That is, 1,211,000 as opposed to the 810,000 that you had estimated.

Mr. Neitzert: The documents make that clear. If the witness knows—

By Mr. Harsha:

Q. Do you know that?

A. These figures bear it out.

Q. Do you know whether the companies that were listed in your master trade report, Textileather and Federal, do you know whether they had increased sales above that estimated by you in this master trade report?

A. I do not.

Q. Do you have any knowledge as to whether their [fol. 6979] actual sales during that year were up or below, I mean over or above the figures you had estimated?

A. I think they were very much above. We were all trying to find a suitable fabric for coating. We tried to turn over all we could find, and the other plants, our competitors, were doing the same thing. The whole industry was doing the same thing.

Q. From these figures it would indicate that from an estimate by you of 810,000 for du Pont and the actual sales as shown by du Pont Exhibit No. 298 of 1,211,000 that du Pont actually sold, roughly, 400,000 yards above your estimate, is that correct?

A. Yes.

Q. Do you know whether any of your competitors, Textileather or Federal, had increased sales amounting to that magnitude?

A. I have no way of knowing.

Q. Did your home office ever bring to your attention the fact that your master tradé report in 1946 was considerably off from the actual sales by du Pont?

A. I don't remember the specific instance that they did, but knowing some of the people who read them and checked them, I am quite sure that I was called on the carpet about it.

Q. You say you think you were?

A. I am quite sure it was pointed out that I was way off.

Q. It was your business to try and stay as close to the actual figures as you possibly could, is that correct?

A. I would, but there again I didn't spend too much time on arithmetic and bookwork.

Q. Now, would you show Mr. Nalle Government Exhibit No. 1350, please?

A. May I ask the date of this last one?

Q. 1946.

A. Yes, 1946.

[fol. 6980]. Q. Government's Exhibit No. 1350 also relates to Fisher Body, Mr. Nalle, and the date of the call is February 17, 1948.

Then you will note that you have, as in other reports, indicated the estimated annual consumption in various types of fabrics. Can you tell us what period of time those figures relate to?

A. I am reasonably certain that relates to the calendar year 1947.

Q. To 1947?

A. Yes, sir.

Q. Am I correct, Mr. Nalle, that the items shown for du Pont, Textileather and Federal in each of the instances, as we have gone over in the previous documents, are comparable, that is, the 6950 quality corresponds to the 21 ounce BT of Textileather, is that correct?

A. They did, sir, except in this report they are broken down a little more. For instance, the 22½ ounce sateen is comparable to the 4502 of du Pont, and the 225 drill is comparable to the 2251 quality, and the 4000 quality would be the 17½ ounce sateen.

The Court: The Court stands recessed for 15 minutes.
(Recess taken.)

The Court: I wish to advise counsel that it will be necessary to adjourn at 3:30 today instead of 4:30.

Mr. Harsha: Thank you.

By Mr. Harsha:

Q. Mr. Nalle, do you have Government's Exhibit No. 1350, the one we were looking at just prior to the recess? [fol. 6981] This is your master trade report on Fisher Body that you made in February, 1948, and I believe your last answer was the estimates on this report referred to the calendar year 1947, is that correct?

A. I believe so, sir.

Q. Would you show Mr. Nalle also du Pont Exhibit No. 298, please.

If you will look at the year 1947, Mr. Nalle, the total yardage sold by du Pont to General Motors in that year amounted to 1,979,000 odd yards, and I believe if you will accept my arithmetic, your estimate will show that you estimated du Pont Company during that period would sell 1,978,000 yards.

Was this report made in the same fashion as the other master report we have discussed?

A. I believe so, sir.

Q. Do you have any explanation as to the very excellent estimates that you made for that particular year?

A. I guess I was just lucky.

Mr. Neitzert: The fact that he made it two months after the year closed might have helped.

By Mr. Harsha:

Q. Now, on this report, Mr. Nalle, you were there listing, were you not, all of the types of fabric which du Pont was selling to Fisher Body at that time?

A. All that du Pont was selling?

Q. Yes.

A. I believe that is correct, sir.

Q. At this particular time du Pont was not selling any top fabric for convertibles to Fisher Body, was it?

A. You would not judge so from the report, but as to the actual sales I cannot be certain.

[fol. 6982] Q. Now, would you show Mr. Nalle Government's Exhibit No. 1351, please?

This is another master trade report which you prepared for Fisher Body, and the date of the call is October 18, 1948. Do you have it there?

A. Yes. May I ask the date of the last exhibit we had? The date of that call?

Q. That was February 17, 1948.

A. Yes. This is approximately nine months later.

Q. Yes. From the date of this document, can you tell us what period of time your estimates for pyroxylin and vinyl coated fabrics as shown on this document, what period of time this refers to?

A. I would say that refers to 1948.

Q. The calendar year 1948?

A. Yes, sir.

Q. And the fabrics that are listed under vinyl resin coated that were sold by du Pont, what were they used for at that time? Was that for upholstery and trim?

A. I would say that it was.

Q. I note that the last box of this form, which was devoted to resin coated, has been marked out by typewriter and there has been inserted the heading "Top Materials", and there are indicated under that heading "Teal" for du Pont, 85,000 yards, and Haartz, 490,000 yards.

Does this refer to the first sales made by du Pont in 1948 of this top material?

A. It doesn't necessarily refer to the first sales. It refers to the first time this item was reported on these reports. As to the exact date of the first sale, I can't tell you.

Q. Was it some time in 1948, however?

A. I think that is correct.

[fol. 6983] Q. What is bow lining; that is the next item shown there?

A. Bow lining is similar to the fabric which is used as the lining on the underside of the top fabric. It is used to cover the side panels, and so forth, in the car, so they will match up with the interior side of the top material.

Q. Would this be in a convertible car?

A. Yes.

Q. Is it a coated fabric or uncoated fabric?

A. Well, I don't know how the trade would generally classify it. I, myself, would classify it as an uncoated fabric.

Q. Is it two pieces of fabric cemented together?

A. Just one piece, no cement.

Q. But the "Teal" is two pieces of fabric cemented together, is that correct?

A. That is right, sir.

Q. And that is the type of material listed here under "Top Materials", is that right?

A. On the bottom of the box, yes, sir. I might say that in the forming or making up of that report those figures were switched around just to take advantage of the space.

Q. I note that your estimates for this year, this is 1948, according to the previous answer, your estimate shows that you anticipated that the du Pont Company would get approximately 1,765,000 yards of the requirements of Fisher Body, and if you will look at du Pont Exhibit No. 298 you will see that for the year 1948 du Pont actually sold 2,001,000 odd yards.

Mr. Neitzert: I take issue with your arithmetic this time, Mr. Harsha. You must have left out the top materials in your figure.

Mr. Harsha: I think I did.

[fol. 6984] Mr. Neitzert: Yes.

The total figure is 1,887,500, if you want to accept my arithmetic.

Mr. Harsha: Thank you.

Strike my last question, then.

By Mr. Harsha:

Q. I note that you estimated du Pont would receive approximately 1,887,500 yards and the actual sales by du Pont to General Motors, Fisher Body Division, during that year were 2,001,000 yards.

Was this master trade report prepared in the same fashion as the others we have looked at?

A. In ~~general~~ I would say so, yes, sir.

Q. Do you know whether your sales to Fisher Body increased slightly over your estimates for the last two months of 1948?

A. I do not.

Q. Were you informed by your office whether this was considered to be a rather accurate estimate?

A. I have no recollection of it, sir.

Q. In your judgment as a salesman would you consider this a fairly accurate estimate, that is, 1,887,000 against 2,001,000?

A. I would on my past performance, covering the items listed.

Q. Now would you show Mr. Nalle Government's Exhibit No. 1352, please, and also du Pont Exhibit No. 311.

I think we don't have comparable tabulations there, Mr. Nalle. I will pass that for the moment.

Mr. Harris, would you show Mr. Nalle Government's Exhibit No. 1355 and du Pont Exhibit No. 308?

[fol. 6985] Mr. Neitzert: May I inquire what you meant, Mr. Harsha, when you said you didn't have comparable tabulations?

Mr. Harsha: I was referring to the fact that I had the wrong chart.

By Mr. Harsha:

Q. Now directing your attention to Government's Exhibit No. 1355, Mr. Nalle, this is a trade report prepared also by you, the customer is General Motors Corporation Truck and Coach Division. The date of your call is shown to be 7/8/47.

Can you tell us what your estimates under pyroxylin and resin coated fabrics, what period of time these estimates refer to?

A. I believe, sir, that referred to the calendar year of 1947.

Q. 1947?

A. Yes, sir.

Q. Was this report prepared in a fashion similar to the reports that you made on your calls to Fisher?

A. An effort was made to prepare it in the same way, but

I had much less success in getting complete information here. In other words, there was a lot more guesswork.

Q. I call your attention to du Pont Exhibit No. 308, and you will note there that the yardage sales to General Motors Truck and Coach Division shown for 1947 are 90,000 odd yards, total du Pont sales, and I believe you will find that your estimated sales of fabrics by du Pont for General Motors Truck for this particular year was 97,000 yards.

Is that correct? Does that accord with your checking?

A. Yes, sir.

[fol. 6986] Q. So that you were approximately 7,000 yards off out of the 90-odd thousand?

A. Yes.

Mr. Harsha: Now, will you show Mr. Nalle Government's Exhibit No. 1356, please.

By Mr. Harsha:

Q. Now, this is also a report prepared with respect to General Motors Truck, and the date of the call is 1 7 48.

Can you tell us what your estimated figures refer to for terms of time?

A. I believe that is also for the calendar year 1947. I notice that the figures are approximately the same as in the previous report.

Q. Is that what you are basing your answer on, the similarity between the figures of the previous report?

A. No, I am basing my answer on the date of the report.

Q. Pardon me?

A. I am basing my answer on the date of the report.

Q. So that this refers to the same period of time as the previous exhibit, 1355?

A. I think so.

Q. Now, I should like to show you Government's Exhibit No. 1357, and this is dated October 18, 1948.

It also concerns GMC Truck and Coach Division. Can you tell us what your estimates refer to in terms of the period of time covered?

A. I believe that is the estimate for the calendar year 1948.

Q. For 1948?

A. Yes, sir.

Q. Now, am I correct that there was no customary period of time when you would prepare these master trade reports?

A. There was to this extent: This form of report was usually prepared sometime during the fourth quarter of the year. If you didn't get it done by the end of that quarter, [fol. 6987] if for some reason or other you had to put it off, we sent them in as soon after that as possible.

Q. Was it customary when you prepared these in the fourth quarter of the year, that they were to refer to the year—

A. The current year, sir.

Q. The current year?

A. Yes, sir.

Q. Did you ever make the reports when you would attempt to estimate for this succeeding year?

A. No.

Q. Now, I note that in reference to du Pont Exhibit No. 308, the du Pont actual sales for the calendar year 1948 are shown as 96,593 yards, and subject to correction. I believe your estimate shows that you estimated du Pont would sell to GMC Truck approximately 108,000 yards.

Does that coincide with your recollection?

Mr. Neitzert: Excuse me a minute. What exhibit are you referring to?

Mr. Harsha: Exhibit 1357.

Mr. Neitzert: My arithmetic says 94,500. Have you made a mistake, or have I?

Mr. Harsha: I think I have.

Mr. Neitzert: The estimate was 94,500, and the actual sales was 96,500.

Mr. Harsha: That is correct. I accept that.

By Mr. Harsha:

Q. Was that report prepared in the same fashion as the others we have looked at?

A. Yes, sir.

Q. Was this considered by your office, do you know, as an accurate estimate?

A. I don't know, sir.

[fol. 6988] Q. Were you ever informed concerning this? Did you have any communication from your home office?

A. I was not—I cannot recall.

Q. Pardon me?

A. I cannot recall that I was informed as to this one, as to the items on the report.

Mr. Harsha: I should now like to pass to the Chevrolet commercial body.

Would you show Mr. Nalle Government's Exhibit No. 1352, and would you also show him du Pont 312?

By Mr. Harsha:

Q. Du Pont Exhibit No. 312 sets forth the yardage sales of coated fabrics to Chevrolet commercial body division during the years 1941 to 1950. Referring now to Government's Exhibit No. 1352 which is your trade report, Mr. Nalle, and the date of call is October 29, 1946, the customer, Chevrolet-Indianapolis (formerly Chevrolet Commercial Body), can you tell us what period of time this estimate refers to, as shown on this exhibit?

A. I think, sir, that estimate refers to the calendar year—

Q. 1946?

A. 1946.

Q. Now, turning to du Pont Exhibit No. 312, you will note that the 1946 sales of du Pont were considerably under your estimate. They were shown to be 535,000-odd yards. Do you have any explanation as to why your estimate was high on that particular occasion?

A. May I scan the report for a minute?

Q. Certainly.

A. I think the explanation of the high figure is that they were buying much more from competition than I was conscious of at the time.

[fol. 6989] Q. Were you informed by any of the purchasing agents to that effect? Were you informed by any of the purchasing agents of GMC, Chevrolet Commercial Body, to that effect?

A. Yes, that was after the war, and they were trying out several other different materials. That is the beginning of these new vinyl resin materials that they were—

Q. Was this used for heavy upholstery?

A. For the regular truck upholstery.

Q. Is that a very heavy fabric?

A. No, we would call it a medium weight fabric, sir.

Q. Did you have any particular trouble with your sample of fabric which you submitted around this time?

A. I cannot recall any particular difficulties then, sir. Sometimes there was a question of getting deliveries on schedule, and I also notice in checking into the report there that I mentioned the Textileather as having received a release for a given yardage, but they are not shown on the consumption figures at all there.

Q. Now, is that a release for the following year?

A. Well, that was a release against the contract. That doesn't mean a contract for 2,000 yards. The first part, the department placed the order and then the scheduling department issued releases against that contract.

Q. Now, is this referred to on 1352? Is this release of 2,000 yards in the fourth paragraph, is that what you have reference to?

A. Yes.

Q. Is that where you had a release of approximately 100,000 yards, and United States Rubber for 6,000 yards, and Textileather, 2,000 yards?

A. Yes, sir. Those were releases at that particular time. They are in no sense of the ratio of the business.

[fol. 6990] Q. Does that refer to the calendar year 1946, or is that for the beginning of the next year?

A. Does which refer to it, sir?

Q. These releases that you are referring to?

A. Those releases, on our last release we received approximately 100,000 yards. That was the release that we had received some time during the life of that contract for shipment at subsequent dates, but I have no way of knowing what the date of that release was.

Q. Now, if I understand your answer, in connection with this document you state that you believe your estimate was off in this particular year with respect to Chevrolet Commercial Body because there was more likely competition than you had anticipated at this time.

A. There was a scarcity of materials and they were trying out a number of different materials made by different manufacturers. In other words, they wanted to broaden their base of supplies to take care of any possible——

Q. Was the du Pont Company having difficulty at that time in keeping up the schedule?

A. I cannot recall, but I would suspect we might be.

Q. This is the period immediately after the war, isn't it?

A. Yes, sir.

Q. And this is the period that I think you indicated in some of your previous answers was a period of short supply of fabrics?

A. Yes, sir, that's right.

Mr. Harsha: Now, will you show Mr. Nalle Government's Exhibit No. 1353?

[fol. 6991] By Mr. Harsha:

Q. This is a report dated January 15th and January 16th, 1948, and it refers to Chevrolet-Indianapolis Division of General Motors.

By the way, Mr. Nalle, is that the same customer as is listed on the previous exhibit, Chevrolet Commercial Body?

A. Yes, sir.

Q. This is the same?

A. It is a change of title of that organization.

Q. Now, was this the only plant which consumed fabrics that was operated by the Chevrolet Commercial Body, do you know?

A. With one very minor exception for production, this was the only one. Occasionally the Flint Service Plant might secure some very limited yardage, only a few thousand yards, to take care of replacement requirements.

This was their production plant, sir.

Q. Now, what year do these estimates refer to as shown on Government's Exhibit No. 1353, Mr. Nalle?

A. These refer to 1947, sir.

Q. Are these in the nature of estimates, then, and weren't your books closed on the 1947 business by this time?

A. These were estimates on the trend of the books. The sales were all in, but in making this I did not go to the trouble of tabulating all of the sales.

Q. Would you get a report from your home office as to the total sales made by du Pont before you made up these reports?

A. There is a figure on the left-hand part of this report, "du Pont sales, 11 months, 1947, 487,541 yards." That is home office information.

[fol. 6992] Q. Now, these figures show with respect to your competitors, Cotan and United States Rubber and Textileather—did you obtain those figures in the same fashion as you described the preparation of other master reports?

A. I put two and two together, and I arrived at a figure I thought was representative of what they were selling.

Mr. Harsha: Now, would you show the witness Government's Exhibit No. 1354, please.

By Mr. Harsha:

Q. This also concerned the same customer, I believe, Chevrolet-Indianapolis Division, otherwise known as Chevrolet Commercial Body, does it not?

A. That's right, sir.

Q. I note the date of this report is November 22, 1948. What period of time was covered by the figures shown here as estimates?

A. That is for the year 1948.

Q. Now, I note that the only sales which you show for the du Pont Company is the item under Fabrilite, 475,000 yards.

Is this the only commodity or only fabric at that time that the du Pont Company was selling to the Chevrolet Commercial Body?

A. I think so.

Mr. Harsha: Would you show Mr. Nalle Government's Exhibit No. 1356. He has that.

By Mr. Harsha:

Q. I would like to direct your attention, Mr. Nalle, to this report. This is the report with regard to GMC Truck dated January 7, 1948. We have looked at it previously in connection with our other aspects.

[fols. 6993-6994] I would like to call your attention to the fifth paragraph on the second page of this document. Do you see the statement which reads:

"I would like very much to get into the heavy duty upholstery situation. Due to the continued scarcity of leather, their consumption of such material will be worthwhile. It is used in the heavier, more expensive truck models. You will recall that we had an order for this in December, 1946, in 'Fabrilit' 7140, but could not provide a satisfactory color match. Consequently U. S. have been enjoying this business."

Now, do you recall that episode?

A. Yes, sir.

Q. And did you lose the business because your fabric didn't match according to the judgment of the General Motors' buyers?

A. We were asked to match a sample of leather, which we attempted to do, and I believe we made up a substantial part of the yardage on the order, and sent them a sample. And they would not accept it.

In the meantime they had apparently put the same problem up to U. S. Rubber, and they at some date along in there, did give them a match which they accepted.

Q. Now, turning to the face of this document under the "Resin coated fabric", the second item is "Naugahyde" with an indicated yardage of 40,000.

Would that be the type of material to which you are referring on the second page of this document?

A. That material would be included in that item. To what proportion, I cannot say, sir.

Q. I see.

A. By that I mean the heavy duty and the medium weight were, I would say, included in that one item.

[fol. 6995] Direct Examination (Continued).

By Mr. Harsha:

Q. I believe the witness has a correction he would like to make in an answer he made just before the adjournment.

A. I have, sir.

Could I see the exhibit on which that error was made, please?

Q. Yes. I have shown the witness Government's Exhibit No. 1356.

A. Shall I proceed, sir.

Q. Yes.

A. In stating that this Naugahyde, the U. S. Rubber material as shown in here, included the heavy duty material, I was in error.

That 40,000 yards includes only the standard type equivalent to our 6026, which is used on the light trucks. I had no information as to the quantity of the heavy duty material [fol. 6996] being used, and when I did have, I think, it is listed on a subsequent report as heavy duty material.

Q. Does that complete your correction?

A. Yes, I think so.

Mr. Harsha: I have no further questions of this witness, your Honor.

Before turning him over for cross-examination, just to keep the record clear, I should like at this time to offer in evidence Government's Exhibits Nos. 1349, 1350, 1351, 1352, 1353, 1354, 1355, 1356, 1357 and 1358, concerning all of which this witness has been examined.

The Court: There are no objections to the offer? They are all received.

(Said documents so offered and received in evidence, were marked Government's Exhibits Nos. 1349 through 1358.)

Mr. Harsha: That is all I have.

Cross-examination.

By Mr. Neitzert:

Q. Mr. Nalle, do you make out trade reports on all accounts, or just some accounts that you service or sell, or attempt to sell coated fabrics to?

A. Mr. Neitzert, we make out trade reports on all important accounts.

Q. How do you determine whether an account is an important account or not?

A. If a customer has a potential usage of 5,000 yards or over, that is considered an important account.

[fol. 6997] Q. Is that true of industries other than the automobile industry?

A. It is true for every industry that we serve.

Q. When did you first start making out master trade reports?

A. Sometime during the fourth quarter of 1946.

Q. What type of trade reports did you make out before you made out master trade reports?

A. We made out what was called a routine trade report.

Q. You referred in your testimony this morning to a trade report that bore a date in 1949 as a master trade report?

A. I beg your pardon? Did you say 1949?

Q. 1939, excuse me.

How do you reconcile what you just said now with your reference to that master trade report?

A. I was in error. I was confused by the fact that some of those reports back there showed yardages, consumption figures, and that led me to that conclusion.

Q. Which report prior to the time when you started making out master trade reports showed estimated consumption figures?

A. We made those estimated consumption figures once a year.

Q. Did all the reports that you made out at that time, which you now refer to as routine trade reports, have forms for those estimated consumption figures?

A. They had forms there, but usually for the subsequent quarters we simply refer to the trade report which had consumption on it, listing the number and date of that report.

Q. Now, these reports that you made out prior to 1946 that had estimated consumption figures differed from your master trade reports in what respects?

A. Simply we were then estimating the expected requirements for the ensuing twelve months.

[fol. 6998] Q. That was before 1946?

A. That was before 1946, sir.

Q. And every trade report that you made out before 1946 had a space for that type of estimate?

A. It did.

Q. How did that estimate differ from the estimates that you made on the master trade reports?

A. They covered a forward estimate of expected consumption. The master trade report covered that year in which it was made.

Q. When did you make out routine trade reports? I don't mean years, but under what circumstances did you make out routine trade reports?

A. We made them quarterly.

Q. When?

A. Quarterly. Each quarter—but each quarter report did not show figures.

Q. Did you make out a report each time that you called on a customer?

A. No, sir.

Q. Do you know under what circumstances the method of making reports was changed and why it was changed in 1946?

A. It was changed because we were getting into a very competitive era. We had a lot of new post war items on the market, and they wanted to have the best records available on who was selling the various items and to what accounts.

Q. For what years did you make out master trade reports while you were in Detroit?

A. Some in 1946, '47 and '48.

Q. Did you make out any master trade reports for the year 1949 while you were in Detroit?

A. No, sir.

Q. When did you leave Detroit?

A. I left Detroit on August 1, 1949.

Q. Will you please show the witness the first master [fol. 6999] trade report on the Fisher Body Company? Will you advise me what exhibit number it is?

Mr. Harsha: Government's Trial Exhibit No. 1349, I believe.

By Mr. Neitzert:

Q. At the time you made out the trade report, which has been marked Government's Trial Exhibit No. 1349, approximately how many suppliers were selling coated and combined fabrics to the Fisher Body Company?

A. I would estimate there were 12 to 16.

Q. What were the four companies that had most of the business?

A. In 1946 that would be du Pont, J. C. Haartz Company, Textileather, and Federaleather.

Q. What percentage of all Fisher's total business do you estimate those four companies had?

A. On a dollar basis I would estimate that represents 75 per cent of it.

Q. Of the four companies, which did you estimate at that time had most of the business, the larger amount of the four companies?

A. I estimated that du Pont had the larger part.

Q. And who second?

A. J. C. Haartz Company.

Q. Your report shows Textileather third and Federaleather fourth, is that right?

A. Yes, sir.

Q. I call your attention to the fact that Government's Trial Exhibit No. 1343-A shows that in 1946 the Haartz Auto Fabric Company sold to the General Motors Com-

pany a total of \$375,000 worth of fabrics. Do you know any General Motors division other than Fisher that bought [fol. 7000] any substantial quantities of fabric from Haartz?

A. No, sir, I do not.

Q. Why didn't you put Haartz on this trade report with the other three large suppliers?

A. Because that represented an item which we had not been able to participate in, and I had no means of knowing or estimating the approximate yardage or evaluation, so I left it off.

Q. What type of material was that that Haartz was supplying to Fisher?

A. That was some coated fabric and some top material.

Q. Was that top material uncoated Teal-like material?

A. That was the Teal type material, sir.

Q. Was the du Pont Company making and offering for sale Teal in 1946?

A. We were.

Q. Were you endeavoring to sell your Teal to Fisher?

A. Yes, sir.

Q. Why didn't you put on the name and the amount purchased from the other twelve or fifteen companies that sold Fisher 25 per cent of its requirements on the trade report which has been marked Government's Trial Exhibit No. 1349?

A. Would you repeat the question, please?

Q. Why didn't you put on the other twelve or fifteen suppliers that had 25 per cent of Fisher's business on your trade report, which is marked Government's Trial Exhibit No. 1349?

A. It would have made an endless clerical job, and would have resulted in figures in which I had no confidence, to try to find out a man that might be supplying one per cent of the total. I followed the practice, if I wasn't able to put in an estimate that I thought was reasonably representative, I left it off.

[fol. 7001] Q. Will you please show the witness Government's Trial Exhibit No. 1350?

You testified, Mr. Nalle, that this was your report for the year 1947. If I asked you these same questions with respect to the suppliers, number, type of materials that they were supplying, and the way in which you made up your trade report, which is Government's Trial Exhibit No. 1350, as I did with respect to Government's Trial Exhibit No. 1349, would your answers be the same?

A. Yes, sir.

Q. I call your attention to the fact that Government's Trial Exhibit No. 1345-A shows that in 1947 the Haartz Auto Fabrics sold to the General Motors companies approximately \$1,413,000 worth of coated and combined fabrics.

Do you know whether any General Motors Division, other than Fisher, bought any substantial quantities of fabrics from the Haartz Company in 1947?

A. It is my belief that they did not, sir.

Q. You have no knowledge of any other purchases?

A. I have no knowledge.

Q. What type of fabrics did Haartz sell at that time to Fisher?

A. They sold coated fabrics and the combined "Teal" type.

Q. Will you please show the witness Government's Trial Exhibit No. 1351.

I call your attention to the fact, Mr. Nalle, that Government's Trial Exhibit No. 1351 shows all of the big four suppliers of Fisher for the year 1948.

Why did you put Haartz on this time when you hadn't done so the preceding two years?

A. That was simply because we were getting in and supplying some of this material, and I could get a reasonably [fol. 7002] good estimate on what they were using.

Q. I call your attention to the fact that Haartz supplied, according to your estimate, about 490,000 yards of "Teal" and about 250,000 yards of bow lining.

Can you estimate what would be the cost or price of those quantities of fabrics?

A. I would estimate the item under the "Teal" caption at between \$2.60 and \$2.75 per yard, and the bow lining item I would guess in the neighborhood of 60 cents. I think that is a reasonably accurate guess.

Q. And these trade reports, are the yards that are here given, lineal yards or square yards, or what kind of yards?

A. Those are what we term running yards—that is, a yard long and whatever the width may be.

Q. Does the width on different fabrics vary?

A. The width varies, 50, 55, some 56 and some 59.

Q. Does the price of these fabrics also vary?

A. Very materially.

Q. What is the highest price shown on that exhibit, 1351?

A. Why, this "Teal" item is by far the most expensive.

Q. Still referring to 1948, was du Pont still the largest supplier of Fisher at that time?

A. 1948, I think we were, sir.

Q. About what percentage on a dollar basis of Fisher's business did you have then?

A. We are talking about the year 1948?

Q. Yes, if you remember.

A. I think we had about 40 percent.

[fol. 7003] Q. And who was second in size?

A. The J. C. Haartz Company.

Q. And your report shows that Textileather was third, and Federa leather was fourth?

A. Yes, sir.

Q. What about the other suppliers? What percentage did they have at this time?

A. You mean the total group?

Q. No, the other group of suppliers that you said aren't on here. You have four here.

A. Four here, and that would leave probably twelve others.

Q. What percentage did they have about that time?

A. They would have about 25 percent.

Q. I show you a document which I have referred to, and which is marked Government's Exhibit 1343-A, and I direct your attention particularly to the page caption "General Motors' purchases of coated fabrics from suppliers other than du Pont for the years 1946 and 1947."

Do you see any of those other suppliers named on that sheet of paper?

A. You are speaking now of suppliers to Fisher Body?

Q. Yes, among the group that you didn't put on there.

A. There is Columbus Coated Fabrics Co., Goodall, Backstay Welt Co., George W. Carter, U. S. Rubber, Brunsene, Allen Industries—I think that covers it.

Q. Did any of those suppliers furnish Fisher with the same kinds or types of coated fabrics that you sold to Fisher?

A. They did.

Q. Did all of them?

A. They all furnished types of coated fabrics we could supply or were potential suppliers to Fisher Body—that we would like to supply to them.

Q. Take for example United States Rubber Company. [fol. 7004] Did you manufacture all of the same kinds of coated fabrics that are manufactured by United States Rubber Company?

A. Essentially so, yes, sir.

Q. What about Cotan?

A. Cotan had the same general line of fabrics we had.

Q. What about Columbus Coated Fabrics?

A. Parallel.

Q. Goodall?

A. Yes, sir.

Q. I think the Court may have gotten the impression from the way Mr. Harsha put his questions this morning that you were not very proud of the accuracy of these estimates.

What is the fact as to whether or not you consider these reasonably accurate trade estimates?

A. I thought on the average they were pretty good.

Q. You didn't intend to be apologizing for any of them this morning?

A. With the understanding that they were interoffice instruments and the people to whom they were intended or for whom they were intended understood the basis upon which they were made.

Q. You mean people in the home office knew, for example, that you weren't running after the fifteen suppliers that had 25 per cent or that they knew that Haartz was supplying—

A. They knew that I didn't like to turn figures in that I couldn't substantiate reasonably well.

Mr. Neitzert: Will you please show the witness Government's Trial Exhibit No. 1352.

By Mr. Neitzert:

Q. I didn't understand what your testimony was with reference to the estimated annual consumption which here is on the front of this exhibit, not including Textileather. [fol. 7005] Will you please restate the facts as to that situation?

A. May I review this?

Q. Yes. I think you made reference to the notes that you had made on the back of the page, to a contract that the customer had with Textileather, and to a release for 2,000 yards under the contract.

A. Well, there is a very obvious omission in there, and the fact that in the body of the trade report I referred to releases which Textileather had at that time, and I showed no consumption figures for them—

Q. Do you know whether or not you left off any other supplier in making this trade report?

A. There is none of the 40 or 46 inch headlining included in there which was probably a 60,000 yard item.

Q. Did you refer to that in a subsequent trade report?

A. I did.

Mr. Neitzert: Please show the witness Government's Exhibit 1353.

By Mr. Neitzert:

Q. Was reference made to that item in that trade report?

A. You refer to in the block listings?

Q. No, I refer to the entire trade report.

A. Yes, sir, it is.

Q. Where is reference made to the headlining?

A. It is shown as a consumption item in the consumption for 1947, and if I may have a minute to check through this—

Q. Maybe I could help you a little by referring you to the last page.

A. I have that. I refer to it stating that, "Cotan has been supplying the light weight headlining material for some time." And so on.

[fol. 7006] Q. Now, the omission of Cotan and Textile-leather from the face only of Government's Trial Exhibit No. 1352 would account for about how much of an error in the business obtained by customers?

A. You are speaking dollarwise?

Q. Either way you can give it.

A. Well, there would be about \$60,000 to \$70,000.

Q. Those items appear on your next trade report, on the face of your next trade report, 1353, Government's Trial Exhibit No. 1353, or do they not?

A. That item is the headlining, 46 inch, where we estimate 90,000 yards.

Q. Now, except for that omission, do you know of any other omissions that appear on any of these Chevrolet master trade reports which have been marked Government's Trial Exhibits 1352, 1353 and 1354?

A. I think they are essentially correct.

Q. Was there any fringe suppliers of Chevrolet Commercial, as there were with Fisher?

A. Practically none.

Q. So far as you know this is all they bought?

A. Yes, sir.

Mr. Neitzert: Now, will you please show the witness a document which is the next trade report in this series for Chevrolet-Commercial, bearing date of January 12, 1950, which is covered by the Government's subpoena, but which has not been marked as a Government Trial Exhibit, and has no Government Trial Exhibit number?

I will ask your Honor for leave to have that document marked as Exhibit DP-557 for identification.

By Mr. Neitzert:

Q. This trade report appears to have been made by [fol. 7007] salesman J. W. Richardson.

Is he the man that took your place in Detroit?

A. Yes, sir.

Q. And I call your attention to the fact that in your report for 1948, Government's Trial Exhibit No. 1354, you estimated that du Pont had about 47 per cent of the yardage at Chevrolet Commercial, while in Mr. Richardson's report for the following year he estimates that du Pont had only 24 percent of the yardage.

Did anything happen after you made out your trade report which has been marked Government's Trial Exhibit No. 1354, that would account for that reduction in du Pont's business with this customer?

A. Well, as we have stated, they went through this period in 1946, and then in 1948 they instituted a policy of purchasing, awarding contracts, I should say, to the three lowest bidders, so that they would have a minimum of three sources in there.

Q. When was that policy adopted?

A. That was adopted in 1948.

Q. What time in 1948?

A. Late in 1948. I think it was in the fall of 1948.

Q. Before or after you made out your trade report, if you remember?

A. I don't remember definitely.

Q. And thereafter did Chevrolet Commercial pursue that policy in selling—

A. They did as long as I was in contact with them.

Mr. Neitzert: Will you now please show the witness Government's Trial Exhibit No. 1355?

This trade report covering the situation at General Motors Truck and Coach bears the date of July 11, 1947, which is the only master trade report included among these exhibits that was made out in the middle of the year.

By Mr. Neitzert:

Q. Explain the circumstances under which that occurred.

A. Yes, sir.

Q. Will you please do so?

A. They had been very slow in reconverting to truck production from their war time assignments, and there was not purchased in 1946—I could not get a line on what

they were going to use, and what they expected to use, so I omitted the trade report.

Q. You made no 1946 report?

A. I made no 1946 report.

Q. Why did you make this one out in the middle of the year 1947?

A. Well, they were slowly, getting slowly started there. They had some pilot models on the production line, and I made out one as best I could on the limited—

Q. When they opened up?

A. No, they had been opened, but doing very little in the way of actual turning out trucks off of the production line.

Q. You have reference to your note on the back of this trade report, and I quote:

“Are slowly getting started on new truck production, and have six pilot models on the production line. It will be a month or so before they are in real quantity production.”

A. Yes, sir.

Q. So that this trade report was made out for the year 1946 in the middle of the year, just as they were starting [fol. 7009] up with civilian production, if I understand your testimony?

A. Yes, sir.

Q. And did I also understand your testimony to be that at the end of the year you made out a new trade report for the year 1947?

A. I believe I would have, yes, sir.

Mr. Neitzert: Will you show the witness Government's Trial Exhibit No. 1356.

Let me interpose here, your Honor. I may have misstated the year I was talking about. The last trade report before the witness was for the year 1947, and it shows the trucks made in 1947, and at that time the witness made out a trade report for that year, 1947 and then at the end of the year he made out another one for the year 1947. I think I may have used the year “1946” by error in asking my question.

By Mr. Neitzert:

Q. Do you now have Government's Trial Exhibit No. 1356?

A. I do, sir.

Q. Why did you show the same yardage figures in Government's Trial Exhibit No. 1356 as you did in 1355, when one was made out before production started, and one was made out at the end of the year?

A. The situation there was such that I couldn't develop any trustworthy information which would warrant any change in my estimates.

Q. Do you show on this exhibit, No. 1356, all of the purchases of this customer from competitors?

A. No, sir.

Q. Which ones are omitted?

A. There is the Hood Rubber people were selling this—I will have to refer to this to get the name of it.

[fol. 7010] Q. Are you referring to Koroseal?

A. This Koroseal item, that was one of the items going into busses, and U. S. Rubber, I believe, was selling quite a lot for coaches and for trim, and for heavy duty trucks, but as to how much, I don't know.

Q. Heavy duty trucks is what you referred to?

A. Yes, the heavy stuff.

Q. Now, are those sales which are not shown on the front of this exhibit referred to in the notes which you have added to the report?

A. May I review for just a second—

Q. Yes, sir.

A. In a general way some of them are.

Q. You have already referred to the heavy duty sales of the heavy duty upholstery at the middle of page 2.

Now, reference was made to the heavy Koroseal sales at the top of page 4.

A. Yes, sir.

Q. Now, why didn't you put that estimate on the front of this exhibit as to the yardage of Koroseal and heavy duty Natgahyde that was being purchased during 1947 by this customer from Goodrich or its subsidiaries, the Hood Rubber Company and the United States Rubber Company?

A. May I point out, sir, that the truck materials were bought by one purchasing group, and the bus and coach materials in general were bought by another group, with their respective follow-up groups and respective engineering groups, and I had no way of getting any trustworthy information as to how much was going into these coaches or busses, and the heavy duty trucks.

Q. Did you solicit that business?

A. We did.

Q. Were you permitted to bid on it?

A. I don't recall an instance where we were.

Q. Were you shown the specifications of plans for those parts?

A. No, sir.

[fol. 7011] Q. Would you explain the fact that those two items were omitted to the home office?

A. Yes, sir.

Q. I suppose from the way they were omitted—

A. They were very much concerned about our poor showing there, and the apparent large volume of materials being consumed, and so much so that my immediate superior, Mr. Brown, came out sometime in late 1948 specifically to go up and see these people to see what we could do about it.

Q. Government's Trial Exhibit No. 1343-A shows on one of the schedules which is a part of that exhibit, a schedule captioned "General Motors' Purchases of Coated Fabrics from Suppliers Other than du Pont for the years 1946 and 1947," and an item Hood Rubber Company, \$36,000.00.

Do you know what that was?

A. I am certain that was the Koroseal item for coach work.

Mr. Neitzert: Please show the witness Government's Trial Exhibit 1357.

By Mr. Neitzert:

Q. Does this trade report, in the way in which it was made up, show the situation that existed at the time it was made up? Does it differ in any respect from the preceding one?

A. Only in that I have been able to get some information as to the approximate heavy duty consumption figures here.

Q. You refer to the item on the face of this Government's Trial Exhibit No. 1357, heavy duty "Naugahyde," U. S. Rubber, 15,000 yards?

A. Yes, sir.

[fol. 7012] Q. By the way, what was the relative cost of this heavy duty upholstery as compared with what you referred to as medium weight upholstery on direct examination, supplied for the lighter trucks?

A. I will have to do a little figuring here.

I would say it was approximately double.

Q. Double the price?

A. Double the price.

Q. Did you attempt to get that business?

A. Yes. I felt very badly about it. I wanted to get it.

Q. Do you recall, either while you were in Detroit or after you left Detroit, whether a further survey was made of the business in coated fabrics of the GMC truck and coach division?

A. I believe Mr. Richardson made a survey shortly after he succeeded me.

Q. Were you ever told what that survey showed?

A. Yes.

Q. What did it show?

A. He told me that I had been——

Mr. Harsha: I object, your Honor. I think this is complete hearsay. This is not a report prepared by this man. It is a survey made by another person in the organization.

The Court: Sustain the objection.

By Mr. Neitzert:

Q. You have referred in your cross-examination to a trip that Mr. A. L. Brown, who has been a witness in this case, made to the GMC truck and coach offices about this time. What was the purpose of that trip?

A. You are speaking of the visit in the fall of 1948?

Q. Yes.

A. To develop more business from this account.

Q. Was that trip made after you made out your trade [fol. 7013] report dated October 22, 1948, which is marked

Government's Trial Exhibit No. 1357, or before the time you made out this report?

A. I believe it was made after.

Q. Did you accompany Mr. Brown on this trip?

A. I did, sir.

Q. Do you recall whether he was able to develop any further information at that time about who was getting the business of this customer?

A. I recall that he was not able to get anything new on the situation.

Mr. Neitzert: Your Honor, I would like to offer in evidence at this time a document which has been marked for identification as DP 557, which is the last in a series of Chevrolet master trade reports which the Government has not included among its exhibits.

(Said document so offered and received in evidence, was market Defendants' Trial Exhibit DP No. 557.)

Mr. Neitzert: I believe that concludes my cross-examination. Thank you.

Mr. Harsha: I have just a few questions.

Redirect Examination.

By Mr. Harsha:

Q. Will you show the witness Government's Exhibit No. 1343-A, please?

Would you direct your attention to the first page of this document that you were shown on your cross-examination, Mr. Nalle. Do you see the item under Fabrics on the first page, coated fabrics and imitation leather?

A. Yes.

[fol. 7014] Q. Can you tell me, in your experience as a salesman of fabrics for the du Pont fabrics division, what the difference between coated fabrics and imitation leather is?

A. The terms are used interchangeably. Originally, when "Fabrikoid" and so on were first made, they were made to look like leather.

Then the industry moved away from the idea of imitation, and felt that their products stood on their own merits. So some people might call them coated fabrics, and some might call them imitation leather.

Q. I believe you testified regarding the use in recent years of these vinyl coated fabrics?

A. Yes, that was post war.

Q. Can vinyl coated fabrics be considered as an imitation leather?

A. Oh, yes.

Q. And they are also a coated fabric, as the name describes?

A. That is right, very definitely.

Q. Now turn to page 9 of that exhibit, sir.

You notice the first company listed there is Haartz Auto Fabrics?

A. Yes, sir.

Q. What was the most important product manufactured by Haartz in the fabrics field in the years 1946 and '47, if you know?

A. I would say that perhaps their most important was top material with some coated fabrics being second in importance to the top material.

Q. Do you have any idea, based on your solicitation of the General Motors' business, and in particular of the Fisher Body business, and your estimate as to the amount shown here—in 1946 there is a total of \$375,000 sold by Haartz to General Motors—approximately how much of [fol. 7015] that would be comprised of top material?

A. I couldn't possibly break that down.

Q. Would your answer be changed with respect to the year 1947?

A. The answer would be the same.

Q. It is true, however, is it not, that during these two years, 1946 and '47, you did not consider on your master trade reports the Haartz Company as an important competitor in the fields of pyroxylin coated and vinyl coated fabrics?

A. They were not one of the groups supplying the parallel products on which I attempted to concentrate my figures.

Q. If you look at the next company, Backstay Welt Company, do you know what they make?

A. They make a variety of coated fabrics or imitation leather products, to the best of my knowledge.

Q. Of vinyl fabrics?

A. I believe so.

Q. Do they make a pyroxylin coated fabric?

A. Yes.

Q. Do they make any other fabric that is used in the automobile industry, to your knowledge?

A. I do not know of any.

Q. Is there such a product as welts that are used in the automobile industry?

A. There are some welts, yes.

Q. What is a welt?

A. A welt is a strip of material wrapped around a cord.

Q. Around a cord?

A. A cord, yes. That is a general description of it.

Q. What is that used for?

A. That is used in the trimming of a car, trimming of a seat, the top, and so forth.

Q. Do you sell welts?

A. Not at present.

Q. When did du Pont discontinue the sale of welts?

A. I have no definite knowledge as to when the date was.

[fol. 7016] Q. Has it been some years?

A. I believe it has.

Q. Are you prepared to say that the figures showing the sales by the Backstay Welt Company of \$184,000 in 1946 do not include any welts?

A. I am not. I do not know how the business was broken down.

Q. The fourth company listed there is Detroit Gasket and Manufacturing Company. Do you know what they produce and sell to the automobile industry?

A. They produce rubber sheets, rubber coated materials, as the name implies for gaskets, and that sort of product, some rubber goods.

Q. Some what?

A. Some coated fabrics.

Q. Rubber coated fabrics?

A. Yes.

Q. Do they make any pyroxylin coated fabrics?

A. I do not know of any.

Q. Do you know whether they make any vinyl coated fabrics?

A. I do not know.

Q. Do you know whether they make any fabrics that are used in the automobile industry for upholstery?

A. I do not know of any, no, sir.

Q. But you are reasonably certain that they do make some rubber coated fabrics which are used for gaskets, is that correct?

A. Yes, sir.

Q. Are they known as a large producer of gaskets in the industry?

A. I would say so, relatively large.

Q. A gasket is used as a part of the automobile engine, isn't that correct, do you know?

A. They use it in many places.

Q. It has nothing to do with upholstery, the gasket, is that correct?

A. They might use some within the body of the car, but [fol. 7017] I am not too familiar with where gaskets go.

Q. Do you know what the Brunsene Company, also listed here, as selling \$47,000.00 worth of materials in 1946—do you know what they make?

A. They make a general line, I believe, sir, of vinyl and oil coated fabrics.

Q. Oil coated?

A. Yes, sir.

Q. Is that oilcloth?

A. Of that type fabric.

Q. Do you know what this oilcloth is used for, this oil coated cloth?

A. It could be used interchangeably with a pyroxylin or vinyl for some of the trim items in the car, the top boots and so forth, and I believe on the back of seats where it doesn't show.

Q. Do you know whether General Motors used it for that?

A. I feel reasonably sure that they used it in the seat construction.

Q. In the seat construction?

A. In the trimming of seats, yes, sir.

Q. Did you ever hear of the Chicopee Manufacturing of Georgia?

A. I have heard of them, yes, in a general way.

Q. Do you know what they make?

A. I believe that their product is a woven fabric. It might be paper or it might be cotton or it might be plastic, probably with a coating on it as a protective surface.

Q. Do you know what that product is used for? Is it used for upholstery by General Motors?

A. I think it is used for seat covers, for covering seats.

Q. But not for the upholstery, is that correct?

A. It is a seat cover that goes over the upholstery.

Q. Do you know anything about this company called [fol. 7018] Automotive Products, Inc.? Have you ever heard of them?

A. I can't say that I have.

Q. You don't know what they make?

A. No, sir.

Q. Have you ever heard of them in the upholstery and trim fields?

A. I may have, but I can't recall it now.

Q. How about the Jansen Manufacturing Company? Have you ever heard of them in the upholstery field?

A. Yes.

Q. In the automobile upholstery field?

A. They are similar to the Backstay situation.

Q. By that do you mean that they make a product similar to that?

A. Paralleling the Backstay Welt Company.

Q. Do they make welts, do you know?

A. I don't know if they are now or not.

Q. Do you know what products they do make?

A. No, not at present.

Q. Do you know what they made in those years as indicated here, 1946 and '47?

A. They were supplying these coated fabric items and some bindings, I believe.

Q. Bindings?

A. Welts and bindings, they are all in the same group.

Q. What kind of coated fabric, do you know?

A. In 1946 and '47 that could have been pyroxylin or vinyl, probably some of both.

Q. You have no distinct recollection as to which it was?

A. It was probably some of both because that was in a period there when the industry was getting into the vinyls.

Q. As I understand it, on your cross-examination you indicated, Mr. Nalle, that in respect to the master trade [fol. 7019] reports which you prepared concerning Fisher Body that there were a number of suppliers other than those which you had listed on your trade reports?

A. Yes, sir.

Q. And you mentioned perhaps some ten or twelve, maybe fifteen other suppliers, and I understood you to say that one of the reasons you did not include them on your report was that you were unable at the time you prepared the report to obtain any accurate figures as to how much they were supplying, is that correct?

A. That is substantially correct, yes, sir.

Q. You had no idea as to what, for example, Haartz was supplying at that time in 1946 or in 1947?

A. No.

Q. And as to these other companies that we have discussed on Exhibit No. 1343-A, I gather that most of those were among that fringe group that you referred to as not having been listed on your master trade reports for these periods regarding Fisher Body, is that correct?

A. Some of them are included here, although I doubt if all of them are in this particular listing.

Q. From what source did you obtain your information by which you stated that the ten or twelve or possibly fifteen fringe suppliers accounted for 25 per cent of Fisher's requirements?

A. From my contacts in the trade, information I would pick up from various buyers, specification engineers, schedule people, and so forth, and from talking with competitive salesmen.

Q. Am I to understand that the Fisher purchasing agents informed you as to each one of these fringe suppliers as to approximately how much they were buying from them?

A. No. I didn't ask them a direct question. You would have to pick it up and gather it from your contacts and conversations.

[fol. 7020] Q. On the basis of your conversations, how did you arrive at the 25 per cent figure?

A. Well, I just put two and two together.

Q. Did you ever discuss the accuracy of your estimate with any of the General Motors' purchasing agents?

A. No, sir.

Q. Is it possible that your estimate on these fringe suppliers might be a little high in 1946 and '47?

A. It is possible, but I do not believe so.

Q. Am I correct in my understanding that in respect to Chevrolet Commercial Body that your trade reports there did not have any fringe suppliers left off?

A. Not any that I can think of.

Q. And with respect to General Motors Truck, what was the situation there?

A. There was a great deal left off of those.

Q. There was that one on the heavy duty item?

A. Heavy duty, and materials that went into busses and coaches. I couldn't get any trustworthy information out of that particular group of people.

Q. I believe you stated with respect to a heavy duty upholstery material in regard to General Motors Truck that you lost out on that business to U. S. Rubber, is that correct, at least along in 1948?

A. I think it was about that time, sir.

Q. I think you stated on cross-examination that you were quite disappointed in not being able to obtain that business for du Pont, is that right?

A. Yes, sir.

Q. Were you told by anybody in General Motors as to why they bought from U. S. Rubber rather than du Pont?

A. Well, in a general way the situation was this: We [fols. 7021-7022] hadn't given them a satisfactory sample when this business first came up.

Q. Is that a couple of years previous?

A. The year previous, the sample referred to in previous testimony, yes, sir. And U. S. Rubber had brought them something that was acceptable, and they saw no reason for changing the situation.

Q. And that continued on through 1948?

A. Yes.

Mr. Harsha: I think that is all.

Thank you, Mr. Nalle.

Mr. Neitzert: Nothing further.

(Witness excused.)

OFFERS IN EVIDENCE (U. S.) .

Mr. Harsha: May it please the Court, at this point we would like to present certain excerpts in evidence which have been taken from documents received under the subpoena which was recently issued to the du Pont Company.

Mr. Houchins: The Government offers into evidence Government's Trial Exhibit No. 1361.

This, your Honor, is a series of excerpts from Automotive Products Trade Reports made out by various du Pont salesmen respecting sales contacts and visits with Fisher Body Corporation.

(Said document, so offered and received in evidence, was marked Government's Exhibit No. 1361.)

* * * * *

[fols. 7023-7024] The Government next offers into evidence Government's Trial Exhibit No. 1362, which is a series of excerpts from plastics department, industrial division, molding powder trade reports. These excerpts concern the contacts and sales efforts of du Pont salesmen with Inland Manufacturing Company.

(Said document so offered and received in evidence was marked Government's Trial Exhibit No. 1362.)

* * * * *

[fols. 7025-7026] The Government next offers into evidence Government's Trial Exhibit No. 1363, which is a series of excerpts from Industrial Sales Trade Reports, Finishes Division, of the du Pont Company, they being excerpts from reports of du Pont salesmen in their efforts with Packard Electric Company.

(Said document, so offered and received in evidence, was marked Government's Exhibit No. 1363.)

[fol. 7027] I next offer in evidence Government's Trial Exhibit No. 1364, which is a series of excerpts from automotive products trade reports, Flint plant, concerning sales efforts with the Olds Motor Works.

(Said document so offered and received in evidence was marked Government's Exhibit No. 1364.)

[fol. 7028] Next I offer Government's Trial Exhibit No. 1365, which is a series of excerpts from automotive products trade reports, Flint plant, concerning sales efforts of du Pont salesmen with the Cadillac Motor Car Company.

(Said document, so offered and received in evidence was marked Government's Exhibit No. 1365.)

[fols. 7029-7031] I next offer Government's Trial Exhibit No. 1366, which is an excerpt from the trade reports of the Rubber Chemicals Division concerning contacts and sales efforts with the Inland Manufacturing Company.

(Said document so offered and received in evidence was marked Government's Exhibit No. 1366.)

[fol. 7032] Mr. Harsha: May I proceed?

The Court: Proceed, please.

Mr. Harsha: In connection with the testimony of Mr. Mark, comptroller of General Motors, during his examination there was introduced Government's Exhibit No. 1343-B, which is his letter of instructions sent out to the various divisions of General Motors requesting them to compile figures on the purchases by the various divisions from companies other than the du Pont Company during the period 1946, 1947, and the first half of 1948.

It was brought out that on the attachment B-1 to that letter, there was a listing by product breakdown under the major headings, such as Anodes, Solvents, et cetera. In view of the fact that I believe it has been of paramount importance in this case to try to develop, in com-

paring the sales and purchase figures, that there are comparable items being compared, I made the inquiry to counsel for General Motors as to whether the reports which they had received from the divisions of General Motors were by the various product breakdowns as listed in the B-1 attachment to this letter of instruction.

Mr. Hurd, would you like to make a statement in regard to that?

Mr. Hurd: Yes, if the Court please, counsel made this inquiry yesterday, and I told him I would check into the matter, and I have, and I am advised that the returns made by the divisions to Central Office, returns which Mr. Mark received, were under the headings as shown on the first page of Government's Trial Exhibit No. 1343-A, and were [fol. 7033] not broken down as to the particular types of items that were included.

In other words, the divisions that made returns, made returns on anodes showing the total purchases of anodes from competitors of the du Pont Company, and the total purchases of chemical solvents from competitors of the du Pont Company, and so on, without identifying what the particular item was called, either by trade name or by other designation, merely the overall purchases that each division made of the item as described in the first page of 1343-A.)

Mr. Harsha: I might say, your Honor, that the government intends to offer this morning several pieces of correspondence and a number of charts and statistical tabulations, and that will conclude the government's rebuttal evidence.

I believe your Honor has been provided with the materials which we intend to offer this morning.

I should say that there are three tabulations which are based upon the testimony and the master trade reports which were prepared by Mr. Thomas Nalle, who was on the stand yesterday, and that we have revised them slightly in accordance with certain portions of his testimony, and I have given copies of those to counsel, but I do not intend to offer them this morning, in view of the fact that they have not had an opportunity to check. So if it is permissible with counsel and, with the pleasure of the Court, when we finish this morning I should like to rest, subject to the right to offer these three other charts when we resume.

The Court: There is no objection to that agreement.

Mr. Harsha: The first document the Government offers [fol. 7034] is Government's Exhibit 1404 which is a letter dated September 27, 1930, written by Mr. F. O. Clements, technical director, research laboratories of the General Motors Corporation, addressed to Mr. E. K. Bolton, chemical director of the du Pont Company.

Mr. Harsha: I might state first, that there are partial portions of the record to which I believe this is addressed, and that this is proper rebuttal evidence. I should like to direct the Court's attention to several statements by Mr. Sloan, one at page 3208 of the printed transcript, where on cross-examination he was asked:

"Wouldn't you say that du Pont's ownership of this ten million shares of General Motors stock has necessarily affected the relationship between the two companies so that they have become, as you expressed it in one of your letters, one family?"

"A. No, I don't think so at all."

And then at page 3212 of the printed record of the transcript Mr. Sloan was asked on redirect:

"Mr. Sloan, on your direct examination you testified in substance that as far as you knew there was never any agreement or understanding between the du Pont Company and General Motors that General Motors would favor the du Pont Company as a supplier."

"Has there been anything in your cross examination to cause you to change your mind, as to that?"

"A. There has not. So far as I know, and as far as the record discloses, to my mind, there has been no change. I still maintain the strongest conviction [fol. 7035] that all transactions were at arm's length based upon the interest of all the stockholders in General Motors, and no other condition entered into it so far as business judgment goes."

Mr. Harsha: I now offer Government's Exhibit No. 1404 in evidence.

(Said document so offered and received in evidence was marked Government's Exhibit No. 1404.)

Mr. Hurd: If the Court please, we object to the document on the ground there has been no proper foundation for impeachment, and on the ground it is not proper rebuttal evidence, and if agreeable to the Court, we will argue it——

[fol. 7036] The Court: We will receive it subject to the objection, to be ruled upon later.

Mr. Harsha: I should next like to offer Government's Exhibit No. 1395 which is a letter dated March 16, 1921, [fol. 7037] addressed to Mr. Irene du Pont, president of du Pont Company, is unsigned and bears the initial in the lower left hand corner of "W".

Mr. Harsha: In regard to this document I should like to read the following stipulation which has been entered into by counsel in the case:

"Subject to defendants' objections as to the admissibility of Government Trial Exhibit No. 1395 for identification, it is stipulated that if Mrs. William C. Durant were called as a witness to testify in this cause, she would testify that she resides at 45 Gramercy Park, New York, New York; that she is the widow of William C. Durant, and that Government Trial Exhibit No. 1395 for identification, purportedly being a copy of a letter of date of March 16, 1921, addressed to Irene du Pont, and bearing in the lower left corner the initial 'W.,' is a document taken from the personal files and papers of William C. Durant, of which she is the owner, and that if Mr. Winfred W. Murphy were called as a witness to testify in this cause, he would testify that he resides at 23 Derby Road, Port Washington, New York; that from 1909 to 1937 he was employed by William C. Durant as a personal secretary, and that he identifies Government Trial Exhibit No. 1395 for identification from the stenographer's initial 'W.' in the lower left corner, and from the style and format as being a letter typed by Suzanne E. Weiller, now deceased, who was employed by William C. Durant as a stenographer and assistant to Murphy,

and that Suzanne E. Weiller in the ordinary course [fols. 7038-7043] of business regularly took dictation of letters from William C. Durant, typed and mailed such letters, and retained copies thereof for filing purposes, but that he has no actual knowledge as to whether Government Trial Exhibit No. 1395 for identification was in fact dictated by William C. Durant or whether it was in fact ever dispatched."

In accordance with this stipulation, your Honor, I should like to offer this document and read it at this time.

Mr. Harlan: Before you read it, may I state the ground of my objection, if your Honor please?

The Court: You may.

Mr. Harlan: Despite the very liberal policy we have been following in allowing the Government to introduce evidence, I must object to this exhibit. When Mr. Harsha showed me this letter and asked me whether we would agree to its authenticity and to its receipt, I caused a check to be made of the files of the du Pont Company, and informed Mr. Harsha that we had not been able to find this letter, either the original or any copy of it in the files of the du Pont Company or in the files of the two individual defendants; and beyond that that I had caused Mr. Irene du Pont and Mr. Pierre du Pont to be shown a copy of this letter, and neither of them had any recollection of ever having seen it prior to the time it was produced by the government.

I told Mr. Harsha that under those circumstances I, of course, could not consent to the admission of this letter coming from the files of a third party and a stranger to this litigation.

[fol. 7044] Mr. Harlan: Mr. Harsha and I have entered into this stipulation:

"With reference to Government Trial Exhibit No. 1395 for identification, it is stipulated between the parties hereto as follows:

"1. That a search of the files of the du Pont Company and of Irene and Pierre du Pont has been made,

and that neither the original of said exhibit, nor any copy thereof, nor any response thereto, has been found, nor do the records of the du Pont Company or of Irenee or of Pierre du Pont disclose any information that said exhibit or a copy thereof was ever received by Irenee du Pont or anyone connected with the du Pont Company;

"2. That if the defendants, Irenee du Pont and Pierre du Pont, were recalled as witnesses in this cause, each would testify that he has no recollection of ever having seen the original or any copy of said exhibit until it was recently shown him by counsel in connection with its proposed introduction in evidence by the Government, and that at no time did he request or seek the resignation of William C. Durant as President of General Motors Corporation, nor did he authorize anyone to do so on his behalf or in behalf of the du Pont Company."

In connection with that, if your Honor will refer to the exhibit for identification itself, you will see that the writer [fol. 7045] of this letter in effect recognizes that Mr. Pierre du Pont and Mr. Raskob and Mr. Irenee du Pont certainly by implication, were entirely ignorant as to who this alleged representative of the du Pont interests, as he is referred to in that letter, was, or as to the episode.

I had one other thing. In view of the fact that neither of us wants to take the time or put these two men to the necessity of coming out here, I had one other item that I was going to introduce, which is a statement on this general subject that was made in the deposition of Mr. Pierre du Pont on direct examination, which I will read on surrebuttal if we haven't got it here.

I have it here, and with your permission I might as well end this situation here.

I read from the deposition of Mr. Pierre du Pont, page 208, where in describing the events that led up to the resignation of Mr. Durant, Mr. du Pont testified as follows:

"Now, Durant said to me after the whole thing was over—he took it very complacently; you wouldn't think

anything had ever happened to him. He was quite as agreeable and unconcerned as he was before anything did happen, and he told me that he would resign as he felt that the bankers would insist on it, or had insisted on it, and he said that he wanted me to take his place. I told him it was not my intention at all for him to leave, much less to take his place. But we ended that part of the conversation.

"He brought it up, told me he was going to resign. He felt it was compulsory. I think he hoped that I would take the position. Afterward it turned out that the Morgan people and others—I don't know whom [fol. 7046] they talked with—did ask me to take the presidency. They insisted on that. I was very unwilling to do it, but they insisted it was the right thing to do, at least temporarily, so I assented to it."

Thank you, Mr. Harsha.

Mr. Harsha: In connection with one statement by Mr. Harlan, I don't think this is the point perhaps to argue inferences to be drawn from communications, but I think he has placed an interpretation not intended by the author of the letter in regard to the next to last paragraph, where I believe the author is referring only to his personal difficulties with which at that time the du Ponts were not familiar, and not to the fact of the intervention of a representative of the du Pont interests to request his resignation. But I think that is purely a matter of argument.

The next exhibit which the Government wishes to offer is a statistical tabulation, Governments Trial Exhibit No. 1387, which is entitled "du Pont Sales of Finishes (Products of Finishes Division) to The Automobile Industry."

(Said document so offered and received in evidence was marked Government's Exhibit No. 1387.)

Mr. Harsha: This is a tabulation which, as indicated by the source notations, has been taken from the various annual competitive reports, which were largely obtained from the returns to the subpoena issued by the Government near the latter stages of this case.

They show in the top column the percentage of requirements of all auto manufacturers supplied by du Pont Finishes Division during the years 1938, '39, '40, '41, and then 1946 and 1947.

[fol. 7047] Then they show the du Pont Finishes Division in the second column, and the dollar sales to all automobile manufacturers during those years.

In the third column, they show the du Pont Finishes Division sales to General Motors which have been taken from the total sales of finishes products reported by the du Pont Company in response to the Grand Jury subpoena.

Then, fourth, they show the percentage of the du Pont sales to General Motors as a percentage of du Pont sales to all automobile manufacturers.

You will note the very high percentage of du Pont sales to G. M. as compared to the percentage of du Pont sales to all automobile manufacturers. They run 92 per cent and higher.

I think there has been unavailable to us a breakdown, further than that given by the Finishes and Fabrics Division reports to the Executive Committee, but based on their figures they indicate percentages of this nature.

In respect to which this is being offered, I should like to direct the Court's attention to certain of the testimony of the witness Williams of the du Pont Company, who was examined concerning the issue as to G. M.'s purchases of finishes throughout the years.

He stated that General Motors' purchases of finishes from du Pont throughout the years represented only about 45 per cent of the du Pont's total sales to the automobile industry, and we are offering this exhibit in rebuttal to that statement, which is further augmented by later testimony.

I might give the page references: page 4234, and then pages 4197, 4203, 4207 and 4209 in which, in various ways, testimony was elicited intending to give the impression [fol. 7048] that the du Pont Company was a very large supplier of a number of automobile companies other than the General Motors Corporation.

We believe that this establishes by their own records that the principal customer in the automobile field by all odds was General Motors, and that the percentage which its purchases bore to du Pont's total sales to the automobile industry was greatly in excess of the 45 percent mentioned by the witness.

Mr. Cox: May it please the Court, it is difficult for me to take this exhibit very seriously, but I intend to treat it, if I can, with the gravity that it does not deserve.

I object to it first on the ground that it is not proper rebuttal, and I take it that objection will be reserved and ruled on later on.

I should also like to object to it on the ground that on its face it is confused, meaningless, and internally inconsistent. I think your Honor may have noted the point I am about to explain without argument in any detail.

I pass over the first horizontal column, which simply contains percentages which appear elsewhere in the record, and which appear to have no relationship, logical or otherwise, to the rest of the exhibit.

But when you come to the second two columns, the horizontal column headed "Du Pont Finishes Division, Dollar Sales to All Automobile Manufacturers", and the next horizontal column that is labeled "DuPont Finishes Division, Sales to General Motors", the point to which I should like to call your Honor's attention is that the Government is comparing unlike things.

[fol. 7049] The sales in the first column, Finishes Division, Dollar Sales to All Automobile Manufacturers, as it appears on the face of the report from which those figures are taken are simply sales of paint or finishes used in the original manufacture of automobiles. They are finishes that are put on automobiles.

The second figure, du Ponts Finishes Division, sales to General Motors, which is taken from a different source, our return to the Grand Jury subpoena, includes all sales of all kinds of paint that are made in these years by du Pont to General Motors.

Now there were, as that return shows, very large and

significant amounts of paint that were not used on automobiles, and were not included in the computation that was made in the column just above. That is a matter that can be argued later, and I shall not refer to the return in detail except to remind your Honor that there is testimony in this record now, for example, that du Pont Company in a year sells to General Motors for use on refrigerators paint that has probably in dollar value of sales in recent years been in excess of one million dollars.

It also shows house paint. There was testimony in this record, as the Grand Jury return will show, of sales of industrial paint, for example, the Electro-Motive Division.

The result of comparing these unlike things is, as your Honor will note, that in the third column Mr. Harsha reaches the astounding conclusion that the sales of du Pont to General Motors are in excess of du Pont's sales to General Motors and all other automobile manufacturers.

In other words, he is proving that the whole is somewhat smaller than the part.

That appears also from the footnotes, which he himself [fol. 7050] has put on the exhibit. In one case the sales in 1946, when Mr. Harsha shows that our sales to General Motors were 97 percent of our sales to all other automobile manufacturers, the footnote B shows that in fact, making computation based on the figures in a competitive report, our sales to other manufacturers were 19 percent of the sales to all automobile manufacturers including General Motors.

I think that explanation will indicate why, your Honor, it is difficult for me to take this exhibit very seriously.

The Court: The same ruling as to the other contested exhibits.

Mr. Harsha: I should now like to offer Government's Exhibit No. 1393 and its companion exhibit No. 1394, which are pie charts, so-called, illustrating the General Motors Corporation per cent and dollar volume of purchases of paints, enamels, primers, lacquers, thinners, and pyroxylin from the three largest suppliers. Exhibit No. 1393 relates to the year 1946 and Exhibit No. 1394 relates to the year 1947.

(Said documents, so offered and received in evidence, were marked Government's Exhibits Nos. 1393 and 1394.)

Mr. Harsha: The sources of these exhibits are indicated at the bottom of the page.

It should perhaps have been augmented by including the Government Exhibit numbers which were subsequently attached to those two documents.

They are the ones which, your Honor may remember, [fol. 7051] were put into evidence during the examination of Mr. Mark of General Motors the day before yesterday and are the General Motors' tabulation of sales and purchases in so-called Schedule I, and the other source is the summary of sales of Finishes products submitted by du Pont Company in response to the Grand Jury subpoena, the number of which, I believe, is Exhibit No. 1344.

The first chart, the one for 1946, which is Government's Exhibit No. 1393, indicates that General Motors' total purchases during the year 1946, of the products enumerated in the heading, amounted to \$14,864,000, of which the du Pont Company supplied \$10,430,000, equaling 70 per cent of the total requirements of General Motors for these products.

The next large supplier, as indicated by the chart, was Rinshed-Mason, which sold \$1,934,000; and the third largest supplier was Pittsburgh Plate Glass, which sold \$582,000 worth of these products or 4 per cent of the total requirements of General Motors.

All other paint suppliers, which were in excess of 500 separate companies, supplied only \$1,918,000 or 13 per cent of the total requirements.

The other chart, the one for the year 1947, is based on the same source material, and indicates similarly that the percentage of the sales by du Pont to General Motors, that is the percentage of General Motors' total requirements, is in the neighborhood of 72 per cent.

Although the Court may note that in 1947 the total dollar purchases by General Motors of these paint products, broadly, amounted to \$26,470,000, or an increase of almost \$12,000,000 over the year preceding,—despite this tre-

mendous increase in absolute dollar figures—, the Court [fol. 7052] will also note that du Pont's percentage of the total remains very close to that of the preceding year, namely, 72 per cent.

In other words, the du Pont Company received \$18,938,000 of General Motors' purchases, and the next largest supplier was again Rinsed-Mason, with 12 per cent, or in dollar figures, \$3,205,000; and the third largest supplier was Pittsburgh Plate Glass Company, amounting to \$938,000, or 3 per cent; and that all other paint suppliers to General Motors amounted to only \$3,389,000 or 13 per cent, that business being split up among approximately 500 different suppliers.

I am sure I will hear from the gentlemen of the defense regarding this, and I think perhaps it might aid the Court in understanding the Government's position in putting these figures together if I indicate briefly what we have eliminated from the figures which were supplied by General Motors in their Grand Jury return, which is now numbered Government's Exhibit No. 1343-A.

The Court will recall that in that exhibit there were a number of items listed under the general heading of Finishes.

There were paints, enamels, primers and lacquers.

Thinners were shown as a separate item. Solvents were shown as a separate item. Pyroxylin was shown as a separate item, and adhesives comprise the other item under the general heading of Finishes.

Now, in connection with the examination of Mr. Mark, I asked for the stipulation of counsel, and it was given, that adhesives might be excluded from a consideration of those products comprising the finishes, so that adhesives have [fol. 7053] been eliminated from this computation, and we believe properly so.

The other item which has been eliminated from the computations entering into this chart is the product which has been listed in the General Motors grand jury return under the heading of solvents, solvents for finishes.

Now we believe we have properly eliminated that item.

and I would like to state at least three of the bases upon which we arrived at that conclusion.

First, it will be noted that in the General Motors brief, which was submitted in opposition to the issuance of subpoenas recently in this case, they made a comparison, product by product, from the finishes and fabrics field. In that they indicated that du Pont had sold no solvents in the finishes category to General Motors during the year 1946 or 1947.

Secondly, you have the testimony of du Pont's own witness, Mr. Williams, who was examined at page 4151 of the transcript in this case, Volume 85, and he was asked to list the products which the finishes division was selling to the automobile industry.

Now, he read off an extraordinarily lengthy list of products which were offered for sale to the automobile industry, but he did not list solvents among those products.

In connection with his testimony, du Pont Exhibit No. 176 was also introduced at this point, and it purported to list the products used in finishing automobiles, and it, too, did not list solvents as one of those finishing products.

It did list a product called "Bonderite", which is a type of solvent used to clean sheet metal. But Williams testified at page 4156 that du Pont does not make this product. [fol. 7054] The third item that I would like to bring to the Court's attention in connection with our elimination of solvents from this computation is the testimony of Mr. Farmer, the government's witness, who appeared here just the other day, and who testified at page 12865 of the stenographer's transcript (page 6950 of the printed transcript)—I might say you will recall he was the witness from the Dibble Color Company which was a distributor, or at least connected with the Pratt & Lambert Paint Company.

He testified that although the du Pont Company had solicited his business for pigments and raw materials for thinners for a number of years, he had never been offered solvents by the du Pont salesmen for use in thinner manufacture. He also testified that you do require solvents to make thinners.

So I think the composite of those three lines of evidence establishes affirmatively that the solvent category in the finishes field is not a product which is manufactured and offered by du Pont for sale in the paint field. We believe that we were justified in excluding it from consideration in this computation:

Mr. Hurd: If it please the Court, we object to Government Trial Exhibits Nos. 1393 and 1394, first, on the ground that they do not fall within the scope of rebuttal evidence, which is a matter, if agreeable to the Court, we will argue in the briefs.

Secondly, we object on the ground that the charts are not accurate and are misleading.

The first inaccuracy that I wish to refer to is a matter not mentioned by counsel for the plaintiff.

In preparing this chart, as counsel has mentioned, reliance was made upon Government's Exhibits Nos. 1344 [fol. 7055] and 1343-A, which are the grand jury returns, —summaries of those—, made by the du Pont Company and General Motors respectively.

Examination of the du Pont return discloses that among the items which they included under this heading of finishes was rubbing and polishing compound. That item was not covered in the General Motors return. We were not asked to include that field, and it is not in there, so that you are comparing apples and oranges.

You are comparing there purchases of a certain number of items made from du Pont including this one item of rubbing and polishing compound which was not in the information to General Motors purchases from competitors of the du Pont Company. That distorts the chart, of course.

Secondly is the matter of solvents. As to that, the return of the du Pont Company to the Grand Jury, which is Government Exhibit No. 1344, discloses that solvents were listed as among the items on which they made a return to the Grand Jury, and they show that they did make sales of paint solvents to General Motors from 1938 to 1941. They do not show any sales in 1946 and '47.

The General Motors return which is Government's Exhibit No. 1343-A discloses that it bought very substantial paint solvents from competitors of the du Pont Company. So that here was an illustration of a situation where du Pont lost all of the business during that period.

Therefore, counsel have omitted it from their chart, and obviously created a very distorted picture. Just to show the extent of this, the solvent items in 1947, which General Motors purchased from competitors of du Pont Company, [fol. 7056] were over a million dollars, which would have a material effect upon the appearance of the pie chart, of course, and would substantially change the percentages.

In 1946 they were over half a million dollars.

So that if you are giving a complete picture of the finishes field as this purports to do, it has omitted an important item which would change the appearance and change the percentages, and it has included an item on the du Pont side without having any comparable one on the General Motors side, which again distorts the picture.

Now, again, I assume that as a matter of argument, counsel is entitled to prepare any type of chart that they wish, but this is a matter of evidence. There should be a foundation for it.

As to this particular chart, as a matter of evidence, there isn't a foundation. The document is inaccurate.

I should say the least counsel should do would be to show on the face of the chart what they have done so that the distortion won't be so confusing, so concealed. If they included on the face of the document a statement that they did not include solvents, that would be one thing.

If they included the statement that they have included rubbing compounds on the du Pont side without a comparable item on the competitor's side, at least the document would not be entirely misleading.

But as it is, it is both, I say, inaccurate and misleading. As a matter of evidence, I suggest the document should be corrected before submission.

Mr. Cox: To amplify what Mr. Hurd said in one re-[fol. 7057] spect, if your Honor please, I think that perhaps the Government has been unintentionally and inad-

vertently confused, as I have been at times, by reason of the fact that the words "solvents" and "thinners" in the paint business are not words of precise meaning.

Indeed, they are frequently used interchangeably to mean the same thing. Sometimes they have a shade of meaning that is different, but as bearing on whether the du Pont Company was offering solvents in relation to what I have just said about the meaning of the words, I should like to call the Court's attention to the du Pont products book for 1946, which covers the period of time that is involved in these figures.

Now that book lists the products by divisions, and in the Finishes Division, at the beginning at the treatment of its products, it has a general listing of categories of products, and the last one is headed "thinners". But that product or those products are described as "clear liquid solvents."

That is true to somewhat the same extent in connection with the description of the products of the Industrial Finishes Division, where the thinners are described as appropriate combination of solvents and dilutants.

Then I also point out to your Honor in the general index of this products book, so far as bearing on the meaning of these terms that the term "thinner" is listed under the general term solvents.

So I think the real question here is not exactly a matter of words, but a question really of usage.

It seems to me that the testimony of Mr. Mark was conclusive the other day, because as I understood that testimony, plus the exhibits that Mr. Harsha put in, the test that was applied by General Motors was whether these products were comparable and competitive with the products put out by du Pont, and for that reason they included these solvents which make a substantial difference in these figures.

Mr. Harsha: There are one or two points I should like to mention here, your Honor.

I think one of the comments mentioned by Mr. Hurd illustrates rather graphically the reason behind the reluctance of the Government to introduce in its case in chief the Grand Jury returns made by the General Motors Cor-

poration. This was because of the difficulty of being able to contrive any analyses which were comparing comparable products.

It was this question that had us troubled for a long time in trying to distinguish between the products sold by du Pont to make a true and accurate comparison of products purchased by General Motors from competitors of the company.

I think that was one of the reasons this morning that I made the request of counsel that if they had compilations showing product by product what they included in the general categories of anodes, solvents, adhesives, and so forth, that in all fairness they should now be made a part of the record because only in that fashion can a really true comparison be arrived at, I believe.

He mentioned, for example, that the General Motors' figures on finishes do not include the rubbing compounds. Well, I just don't know how anyone could arrive at that conclusion from looking at their figures because they throw anything into this heading, and there certainly is no way [fol. 7059] of determining from their figures what they have included or excluded.

That is one of the reasons we were interested in trying to determine that. It doesn't seem to be available, however, but I don't see them come forward with tabulations which show that these were items which were not included in the General Motors return.

I will be delighted to make any adjustments necessary to be sure we are comparing comparables with comparables. But in the absence of this, I don't see how it is possible to take care of objections, such as that voiced by Mr. Hurd.

In respect to the objection by Mr. Cox, the product book is not in evidence. We were relying on those matters which are now a matter of record, including the testimony of their own witness, including the testimony of the witness that you did not have solvents as such.

It is true you do have thinners, but it was not being offered for that reason.

We do not think these charts are misleading or inaccurate. If there are particular items they point out that

should be included or excluded from one side or the other of the charts, I will be delighted, as I suggested previously, if we could sit down and discuss the matter, and hold the matter open.

Mr. Hurd: May I just refer briefly to the matter of the rubbing compounds?

As counsel said, he didn't realize it was omitted from the General Motors' study. The General Motors' study identifies the items being covered, as Exhibit No. 1343-A discloses. It has the general heading of "Finishes," but has the specific designations beneath that.

[fol. 7060] The first is paints, enamels, primers and lacquers. Rubbing compounds certainly could not be any of those.

The second is solvents. Rubbing compound can't be that.

Then there are thinners, and next pyroxylin, and rubbing compound can't be that.

Now, as it turns out, adhesives is not a Finishes' product, but is included here, as I explained the other day, due to the fact that the du Pont Finishing Department happens to make it, and that is the category we were giving.

But there is no difficulty, in comparing these documents, telling that the General Motors' study did not include rubbing compound, whereas it appears on the face of the du Pont document.

The Court: Well, it will be received subject to the objection, and passed upon by the Court later.

The court stands recessed.

(Recess taken.)

The Court: Proceed, please.

Mr. Harsha: The next exhibit which the government offers, your Honor, is Government's Trial Exhibit No. 1400, which also deals with the same general field as the two previous exhibits. It is a tabulation rather than a products chart, and it shows General Motors' purchases of paints, enamels, primers, lacquers, thinners and pyroxylin for the years 1946 and 1947, and it indicates the dollar volume.

First, the total shown from all suppliers was, namely, \$14,864,000 in 1946, and then it shows that the du Pont Company supplied slightly over 70 per cent of that total or \$10,430,000.00.

[fol. 7061] Then listed under the heading "Supplied by Other than du Pont" are the names of the other paint companies selling to General Motors during that year, listed in terms of descending importance dollarwise, and the Court will note that the largest indicated there is Rinsed-Mason with sales of \$1,934,000.00, and that they descend quite rapidly in size of volume down to the Barker Chemical Company which is indicated as \$30,000.00. Of those below that which are not listed, none has any individual company sales which amounted to more than \$30,000.00, and there were altogether over 400 of these suppliers not listed, none of which made total sales in excess of \$30,000.00 for that year. The total of all the some 400 odd suppliers amounted to roughly, \$664,000.00, and the same observations apply to the 1947 dollars volume which indicates that du Pont, in that year, supplied 71.55 per cent of General Motors' requirements, or, in dollar volume, \$18,938,000.00 as contrasted with General Motors' total purchases of these products amounting to, \$26,470,000.00, and the Court will note listed below are the other suppliers which, after you have passed the first three or four, not one of which had individual sales in excess of one per cent.

Mr. Hurd: If the Court please, we make the same objection to Government's Exhibit No. 1400 as to Government's Exhibit No. 1393 and 1394, and that is that it is not rebuttal evidence; that it is inaccurate, misleading, and that it is without foundation.

The Court: It won't be necessary for the Court to repeat each time, but the ruling on all of these contested exhibits are the same, namely, that they are received subject to objection and will be ruled upon later.

[fol. 7062] (Said document, so offered and received in evidence, was marked Government's Exhibit No. 1400.)

Mr. Harsha: Next I should like to offer two exhibits dealing with the purchases by General Motors of the prod-

uct anti-freeze. These are Government's Exhibits 1389 and 1390.

Government's Exhibit No. 1389 is a schedule showing in absolute dollar volume and also in percentage, General Motors' purchases of anti-freeze from the du Pont Company and from all other suppliers who sold \$500.00 or more, of anti-freeze to General Motors during the year 1946.

The Court will observe that the du Pont Company, which is listed first, had sales to General Motors of \$668,000.00, roughly, amounting to 97 percent of the total purchases by General Motors, and thereafter are listed the other suppliers, the largest of which was Grimm-Hansen-Treland Company, with sales of \$4,163.00, and there are thereafter listed in descending importance, the other suppliers who had total sales in excess of \$500,000.00, and there were also 43 other suppliers not listed on this who had sales of less than \$500 apiece.

The total of all their suppliers amounted to three percent of General Motors' total requirements.

The same observation holds with respect to Government's Exhibit 1390 which is a listing of General Motors purchases of anti-freeze from du Pont and other suppliers who sold \$500 or more to General Motors during 1947, and in that year du Pont is indicated as supplying 97.6 percent of General Motors total purchases and the next [fol. 7063] largest supplier was Miller Auto Supply & Equipment Company with sales of \$10,634.00.

The rest were all smaller than that, and all other suppliers amounted to only 2.4 percent.

The sources for the tabulation for this exhibit, and also for the preceding exhibit are shown at the bottom of the page, and are the two returns, one made by General Motors, and the other made by the du Pont Company to the Grand Jury preceding this case.

Mr. Hurd: If the Court please, we object to 1389 and 1390 on the ground that they are not rebuttal evidence.

(Said document so offered and received in evidence, were marked Government's Exhibits Nos. 1389 and 1390.)

Mr. Harsha: Next, I should like to offer two charts dealing with the subject of upholstery and trim. These are exhibits 1391 and 1392.

Exhibit 1391 shows General Motors Corporation percent and dollar volume of purchases of upholstery and trim during the year 1946, and indicates the percentage supplied by the du Pont Company as opposed to others, the two other major suppliers and all other suppliers there listed.

I should indicate that by way of indicating the source, these two are based upon the Grand Jury returns submitted by the General Motors Corporation and the du Pont Company, and in connection with the estimates, or, rather, with the dollar volume sales here shown, the Government has confined its comparison—I wish to make this clear—[fol. 7064]—it has compared du Pont's sales to General Motors of its "Fabrikoid,"—that is the pyroxylin coated fabrics—the du Pont's sales of "Fabrilit" and "Cavalon," which were identified by previous witnesses in the case as being the coated fabrics used for upholstery and trim materials by General Motors' various divisions, and we have contrasted to du Pont's sales only the purchases indicated by General Motors in Government's Exhibit No. 1343-A, which are listed under the heading "Imitation Leather" for those two years.

We have eliminated from the comparison here the item which General Motors has listed as "coated fabrics". The reason for that was that in the course of the examination of the witnesses, particularly the examination of Mr. Nalle, he indicated that, when it was called to his attention, the names of various of these suppliers that General Motors had listed under the category coated fabrics, that they made fabrics and sold to General Motors, fabrics other than those used for upholstery and trim.

There were welts, if your Honor will recall, and gimps, and so forth, which were not offered for sale by the du Pont Company, and there were other coated fabrics which were used for gaskets and washers which have nothing to do with the use of fabrics, as upholstery and trim, and for that reason we have excluded those, and we have also elimi-

nated the combined fabrics or "Teal" which, according to the testimony and the documents now in evidence, du Pont was not selling during the years 1946 and 1947.

Mr. Hurd: If the Court please, we object to Govern- [fol. 7065] ment's Exhibit 1391 and 1392, first on the ground they are not within the scope of rebuttal; and secondly, on the ground that they are inaccurate and without foundation. This is worse than comparing apples and oranges. Here they have compared apples and potatoes. Under counsel's own statement to the Court, they have compared coated fabrics known as "Fabrilit" and "Cavalon," he says, made by the du Pont Company and not with coated fabrics as shown by the General Motors return, but with its imitation leather only, and the result is, as far as this comparison is concerned, they do have on the one side the du Pont sales to General Motors of coated fabrics, "Fabrilit" and "Cavalon," plus imitation leather, "Fabrilitoid," and then on the other side the General Motors purchases, only of the imitation leather, omitting coated fabrics which were set out in the return to the Grand Jury in the hearing in 1343-A.

The distortion on this is phenomenal. The coated fabrics as shown on General Motors exhibits are considerably in excess of its imitation leather purchases from competitors of du Pont, so that they have taken the smaller group of purchases and compared that with the combined purchases from the du Pont Company, resulting in this enormous distortion, both in the figures and percentages, practically a complete reversal of the true picture as shown by the evidence.

I would also like to refer briefly to the excuse that they give for doing this, that the witness testified that some of these companies from whom General Motors purchased these materials made something other than coated fabrics. [fol. 7066] There is no evidence that those outside items were included in this.

The instructions, the Court will recall, given to the divisions were to include only items that were purchased

from competitors of du Pont, items purchased from companies who were competing with du Pont as to the particular product, so that on the record as it stands, there is no evidence that anything was included in the General Motors' return that is not comparable to an item that would have been available from du Pont at the same time. So that these two charts, not only are inaccurate, but the picture they create is completely prejudicial and completely reverses the true facts as shown by the evidence in the case.

Mr. Neitzert: I have a few supplemental remarks to make about these exhibits. In offering these exhibits, your Honor, the Government must abandon all pretense of relying upon the record. It has adopted a policy of completely ignoring the record.

Now, I just want to point that out in some respects to your Honor. You will notice that these exhibits are captioned "General Motors Corporation per cent and dollar volume of purchases of upholstery and trim". Now, upholstery and trim are coated fabrics, but the record shows that a great many other coated fabrics are sold by du Pont to General Motors, and by competitors of du Pont to General Motors, other than upholstery and trim, such as top materials, winter front materials, insulating materials, gaskets, diaphragm materials, and many other commercial applications, seat covers, as well as uncoated combined fabrics.

All of those are included in the grand jury figures submitted by both du Pont and by General Motors.

[fol. 7067] Now, the government has a perfect right, of course, to ignore these many categories of materials in which the two companies are competing and pick out only upholstery and trim, and compare that and ignore the other fields in which competition exists if they want to do that.

It isn't very helpful to your Honor for them to make such a presentation, but they could do it if they want to, but if they are going to do that they are obligated to your Honor to at least make the presentation factual and to make it accurate.

Now, that is what they have not done here, and they have not done it for two reasons: First; they have no basis for contending in the record in this case that all of the du Pont sales are sales of upholstery and trim. They have put everything in. There is nothing whatsoever in this record to show that these du Pont sales are sales of upholstery and trim only. The evidence is to the contrary.

The second error that they have made is that they have completely ignored all of the evidence that all of the upholstery and trim bought from competitors is not in these charts. They have short changed us coming, and then turned around and short changed us going.

Now, if your Honor will recall the document upon which the du Pont sales are based, it is Government's Trial Exhibit No. 1344, which lists the coated fabric products, or rather the products manufactured by the Fabrics Division, that were sold to General Motors in 1946 and 1947, and the items shown are under the following captions and classified and described as follows:

[fol. 7068] First, the general heading is "Fabrics and Finishes Department, Fabrics Products"—not fabrics, not coated fabrics, not imitation leather, but "Fabrics Products."

Then the first is "Fabrikoid," and the next is "Fabrilite"—obviously "Fabrilite" products.

Then "Cavalon" products, and then "Fairprene" products.

Well, all "Fabrilite" is not an upholstery material as the evidence shows in this case. All "Cavalon" products are not upholstery material.

We offered in evidence Exhibit No. DP-228 which shows that there are many products made out of these materials other than upholstery and yet there is nothing in this record, nothing whatsoever in this record, to show that the materials which they had put in this chart are only that small—not small, but large segment of "Fabrikoid" and "Fabrilite" that goes into upholstery.

It is reasonable to assume, and we must assume on the basis of evidence offered in this case, that those "Fabrikoid" and "Fabrilit" products include such things as case coverings, tire coverings, spring boots, shop aprons, seat covers, window shades and curtains, work clothing, match covers, all of which are "Fabrikoid" and "Fabrilit" products, or coated—in other words, none of which come into the categories of upholstery.

So much for the short change we got on the going end when they were looking at the Grand Jury returns of the du Pont Company.

Now, let's see what they did when they started to use the returns of the General Motors Company.

The returns of the General Motors Company appear in [fol. 7069] Exhibit No. 1343A. As Mr. Hurd has said, they have selected less than half of the coated fabric products purchased by General Motors to be included in this exhibit.

They have omitted entirely the schedule of coated fabrics purchased by General Motors from competitors, as distinguished from the schedule that is captioned "Imitation Leather," although the record shows, and Mr. Nalle testified, that the two terms are used interchangeably and unquestionably some of the General Motors' witnesses put products such as United States Rubber's vinyl coated fabric in one category, and some put it in another, which is obviously the case because United States Rubber products appear in both schedules, both the coated fabrics and the imitation leather schedules.

So it is conclusive that some of the General Motors Divisions treated it as General Motors' upholstery and some considered it an imitation leather.

The same thing is true of Goodall fabrics.

Now, the witness testified not as represented by government counsel, but he testified that many of these suppliers whose names appear in the coated fabrics' schedule, carried the identically same line du Pont carries and sells, identically the same products.

We have testimony all through this record that the sales

made by United States Rubber, Goodall, Hood, Columbus Coated Fabrics to the Truck Division of General Motors were sales of upholstery, and only upholstery. Yet those particular items are omitted here, large items, items that exceed the sales to General Motors of the fabrics which have been classified by the General Motors as imitation leather.

Another large omission, your Honor, is the omission of [fol. 7070] the Haartz Company. Counsel inadvertently stated that the record shows that in 1946 and 1947 we were not making "Teal" which was the principal but not the only product sold by Haartz to General Motors.

However, page 7000 shows that yesterday Mr. Nalle testified as follows:

"Q. Was the du Pont Company making an offering for sale 'Teal' in 1946? A. We were.

"Q. Were you endeavoring to sell your 'Teal' to Fisher? A. Yes."

Brown so testified, and so did some of the other witnesses.

On page 7003 of the record, it appears that I showed the Witness Nalle the schedule and I said:

"Are any of the people in there your competitors? This is the schedule of suppliers of coated fabrics, and now name them. Name the large ones such as United States Rubber, Columbus Coated Fabrics, Goodall, and U. S. Rubber,"

and he testified that they were selling the same thing to General Motors that du Pont was selling to General Motors.

Then, on redirect examination, beginning on page 7013, Mr. Harsha came back and re-examined the witness on this schedule, and he made completely inadmissible these pie charts at that time. His own witness, with his own examination of his own witness, he developed first that coated fabrics and imitation leather are interchangeable

terms and whether you use one or the other depends on [fols. 7071-7074] whether you go back to the earliest days when everything was imitation leather, and before, as he said, the time when "coated fabrics began to stand on their own feet" so that the manufacturers no longer relied upon their resemblance to real leather to obtain sales.

Now, Mr. Harsha went down the list with the witness, these lists of suppliers that appear in General Motors' schedules of coated fabrics sellers, and the witness pointed out with respect to I think all but two of the companies mentioned by Mr. Harsha, that they were selling vinyl coated fabrics and in some cases rubber coated fabrics such as our "Cavalon" and in other cases pyroxylin coated fabrics such as our "Fabrilit," to the public whether or not to General Motors, he didn't know, but, with the possible exception of two concerns of which he had no knowledge, the concerns in that exhibit were selling all of the products listed in the Grand Jury exhibits supplied by the du Pont Company and upon which the Government bases this chart.

There could be no clearer, more obvious, deliberate misstatement of the facts than those contained in these pie charts.

I thank you.

[fol. 7075]. (Said documents so offered and received in evidence were marked Government's Exhibits Nos. 1391 and 1392.)

Mr. Harsha: The final exhibit I wish to tender in evidence at this time, your Honor, is Government's Exhibit No. 1388, General Motors' purchases in dollars from du Pont and competitors of du Pont, involving products produced by du Pont and others as competitors in the market, and it covers the years 1946 and 1947.

The categories set up are similar to those which are contained in the previous exhibits under the heading of "Finishes", and you will note the items of paints, enamels, primers and lacquers, with the source indicated for those [fol. 7076] figures, and then the pyroxylin and the thin-

ners which we believe are the items properly to be considered under the general categories of finishing items. It indicates, for example, that in 1946 the du Pont Company supplied approximately 70 per cent of those items which General Motors was purchasing.

In respect to fabrics which have been arranged in the same fashion, discussed in the previous two exhibits, we confined them to upholstery and trim, namely the "Fabrikoid", "Farrilite", and "Cavalon" produced by du Pont, and compared that with the imitation leather purchased by General Motors from competitors of du Pont, indicating the percentages there.

The third general group is that of anti-freeze which was also covered in a previous exhibit.

This really pulls together those three sets of exhibits, and shows that on an overall basis the total purchases from du Pont during 1946, for example, of these three categories, amount to \$13,119,974, as contrasted with the purchases from competitors of the du Pont Company of \$5,150,274, or du Pont supplied 72 per cent out of the total of \$18,270,248.

The same analysis applies with respect to 1947 where, it will be seen, that in the lower right-hand corner that the du Pont Company supplied 70 per cent of these products enumerated in the above categories.

That is our final offering, your Honor, subject to the three other exhibits—I am sorry, there are two others. I withdraw that.

Mr. Hurd: If the Court please, we object to Government's Exhibit No. 1388 on the ground it is not rebuttal evidence, and also on the ground that it is inaccurate and not supported by the record.

This is the culmination of all of the errors and misrepresentations contained in prior documents, and in addition, it has a few of its own.

I think I should just point out some of the inaccuracies in order that counsel may have an opportunity to correct their monster, if they so desire.

In the first column, under "Finishes," the first heading is "Paints, Enamels, Primers and Lacquers." That is

defined in the footnote No. 1 as "Including all items listed in du Pont's 'Sales by Products to General Motors' summary which are classified in it under the heading 'Finishes Products,' except thinners and heavy-bodied cements and pyroxylin solutions."

That definition is inaccurate in that they have excluded "Solvents" without so indicating, and the solvents' figures are substantial there, and the purchases from competitors of du Pont would materially change the percentages.

The next column at the head to the left under "Fabrics," the fabrics is again comparing imitation leather and coated fabrics as purchased from du Pont, with only imitation leather purchased from competitors of du Pont.

They have omitted all coated fabrics purchased from competitors of du Pont which are far in excess of the imitation leather items. They are practically equal to the total figures of all of the purchases shown in this chart under "Fabrics"; and the last inaccuracy to which I wish to refer is contained in footnote No. 2 at the bottom of the [fols. 7078-7087] page where it states that "No data available on whether du Pont produces this item which is listed in General Motors' Grand Jury exhibit above as 'pyroxylin' in general category of 'finishes'."

That is contrary to the record.

The documents which they have introduced in evidence, Government's Exhibit No. 1343-A, on its face shows that this was a competitive product, a product competitive with that made by du Pont, and in the testimony of the witness Mark the same information is substantiated.

Mr. Cox: I should like to point out, if I may, another infirmity in this document which Mr. Hurd quite properly described as a "monster," and that is the Government in the attempt to try to make the kind of showing they find attractive, has carefully selected from Government's Exhibit No. 1343-A only those products they find attractive in terms of percentage.

The total purchases shown from the competitors for 1947, in Government's Trial Exhibit 1343-A, comes to \$21,936,000, whereas they have by this most extraordinary process of selection, been able to reduce that total on this exhibit to about \$9,000,000.00.

They do that by omitting chemical anodes and chemical solvents and adhesives, and other products, which General Motors buys substantially from competitors, and in very small quantities from du Pont.

In making this comment, unlike Mr. Hurd, I have no hope that they will confess their error.

(Said document, so offered and received in evidence, was marked Government's Exhibit No. 1388.)

[fol. 7088] The Court: Is counsel ready to proceed?

OFFERS IN EVIDENCE (G. M. C.)

Mr. Hurd: If the Court please, I have a few exhibits that I would like to offer without reading. The Court has been given a set of them.

Whereupon To Further Maintain The Issues On Their Behalf, The Defendants Introduced The Following Evidence, In ~~Sub~~ Rebuttal, To Wit:

Mr. Hurd: The first exhibit is General Motors Exhibit No. 267-A, which I believe was offered some time ago in the course of the ethyl portion of the case.

At that time counsel for the government had not had an opportunity to examine, and the record is a little vague as to whether the offer was temporarily withdrawn. I don't know whether the exhibit is in or out, but to clarify the record I offer General Motors Exhibit No. 267-A.

(Said document, so offered and received in evidence, was marked General Motors Exhibit No. 267-A.)

Mr. Hurd: I next offer General Motors Exhibits Nos. 297 and General Motors Exhibit No. 298.

GM Exhibit No. 297 is a letter from Mr. Pratt to Mr. Lefebvre, dated December 20th, 1926.

General Motors Exhibit No. 298 is a letter from Mr. Lefebvre to Mr. Pratt, dated January 24, 1927.

(Said documents, so offered and received in evidence, were marked General Motors Exhibits Nos. 297 and 298.)

Mr. Hurd: I have a series of three documents, General [fol. 7089] Motors Exhibits Nos. 299, 300 and 301, which I offer in evidence.

Mr. Harsha: Are you going to read those, Counsel?

Mr. Hurd: No, I am not.

General Motors Exhibit No. 299 is a letter from Mr. Melville C. Williams to myself, dated December 13, 1948;

General Motors Exhibit No. 300 is a letter from Mr. Hotchkiss to myself, dated December 17, 1948;

General Motors Exhibit No. 301 is a letter from myself to Mr. Williams, Dated December 20, 1948.

(Said documents so offered and received in evidence, were marked General Motors Exhibits Nos. 299, 300 and 301.)

Mr. Harsha: In respect to the last three exhibits, I should like to interpose an objection, your Honor, on the grounds that these are apparently offered by counsel as the correspondence relating to the fashion in which the decision was reached as to the categories of products which General Motors was to make a study of and was to compile their purchases from competitors of the du Pont Company.

Our objection relates to the fact that, I gather from statements made earlier by counsel, they intend to adduce these documents to show that the categories were those which were suggested by the government.

I would like to object to their introduction unless an earlier document, which was a draft letter prepared by counsel outlining these categories, is also included in the record. We have that letter in our files. I have photo-stats just made of it, and I believe that it has a bearing upon the inferences to be drawn upon that particular [Vol. 7090] question as to who is the originator of the categories which appeared finally in the General Motors grand jury return.

The Court: Are you familiar with this exhibit prepared by counsel?

Mr. Hurd: I am familiar with it. I have no objection to their introducing it if they wish.

OFFER IN EVIDENCE (U. S.)

Mr. Marsha: Then may I have leave to introduce that document as Government's Exhibit No. 1407?

The Court: You may. It is received.

(Said document, so offered and received in evidence, was marked Government's Exhibit No. 1407.)

Mr. Hurd: At this time, we wish to call a witness on the subject of anti-freeze. Mr. Thompson, will you take the stand, please?

IRVINE W. THOMPSON, called as a witness on behalf of the Defendants, in surrebuttal, having been first duly sworn, was examined and testified as follows:

Direct Examination.

By Mr. Hurd:

Q. Give us your full name, please.

A. Irvine W. Thompson.

Q. Where do you live, Mr. Thompson?

A. Detroit, Michigan.

Q. By whom are you employed?

A. By the Chevrolet Motor Division of General Motors Corporation.

[fol. 7091] Q. In what capacity are you employed?

A. Well, I really have two titles: one, General Parts and Accessories Merchandising Manager for the Chevrolet Division, and General Manager of the General Motors Parts Division.

Q. What, in general terms, is the activity of the General Motors Parts Division?

A. Well, the General Motors Parts Division is purely a service organization. They service the products, that is, the spare parts and accessories for the Buick, Oldsmobile, Pontiac and Chevrolet Divisions.

Q. What do you mean by servicing the parts?

A. The dealer sends the order into us for the merchandise, and we ship it in accordance with his requirements.

Q. What is the nature of this merchandise?

A. Merchandise is the service parts of the products as well as the accessory items, which we call accessories.

Q. Where do you acquire these parts and accessories?

A. The parts and accessories are acquired from many sources. The various divisions make their own parts, a good share of them. The accessories we buy on the open market where we can get the best product at the best prices.

Q. Are these parts and accessories that you merchandise

all acquired by the dealers or are they used up in production by the divisions?

A. We only are interested in the parts end of the business, the parts that are required to service the vehicles. In other words, the dealers buy them for resale purposes.

Q. When did you first go with General Motors?

A. I went with the Chevrolet Division in 1923.

Q. What was your position at that time?

A. My first position was a field representative calling on dealers in the interest of sales of our products and servicing of them.

[fol. 7092] Q. Will you briefly trace the history of your employment from that time up until today?

A. Well, briefly, I started in in Baltimore as what might be termed a field representative, and then was transferred to various offices throughout the country.

In 1933 I was transferred in the central office on the central office staff.

Q. In what capacity?

A. At that time my title was manager of parts and accessories in the eastern part of the country, eastern half of the United States.

About a year later I was promoted to the executive assistant in charge of all operations of parts and accessories, and then about five years ago I was made the general manager of the department.

Q. Mr. Thompson, among the items that the parts division merchandises is anti-freeze. Has that been included at any time?

A. We have been merchandising anti-freeze since 1933.

Q. By "we," to whom do you refer?

A. All of the car divisions, that is, Buick, Oldsmobile, Pontiac and Chevrolet, that come under the General Motors parts division.

Q. Is there more than one type of anti-freeze?

A. Yes. There basically are two types of anti-freeze: the permanent, so-called permanent, and the nonpermanent type of anti-freeze.

Q. Can you tell us in nontechnical language the general nature of the items that fall within these two categories?

A. I think the simplest way of putting it would be that the permanent type of anti-freeze obtains its name from the fact that it has a higher boiling point than the nonpermanent type. So in the trade, at least, we generally refer to it as the permanent and the nonpermanent type.

[fol. 7093] Q. Do you know in general the types of materials that fall within these two categories?

A. Basically the nonpermanent type is an alcohol type of anti-freeze. The permanent, I suppose, is a more technical name, but I would say it came in the glycerine family.

Q. Which type of anti-freeze was the parts division merchandising in 1933?

A. We were merchandising in 1933—the only type that we were merchandising was a permanent type of anti-freeze.

Q. From whom did you acquire that?

A. That was purchased from the Glycerine Producers Association.

Q. Do you know who the members were of that association?

A. Well, I don't know whether I know all the members, but I remember Swift and Armour were the two important ones. It was a meat packers association, I imagine.

Q. Was the du Pont Company a member of it?

A. Oh, no.

Q. At this time you say you were merchandising this permanent anti-freeze, were you acquiring for resale any other type of anti-freeze except the permanent in 1933?

A. No, we were only merchandising the permanent type of anti-freeze.

Q. How long did you continue to merchandise only the permanent type?

A. We merchandised the permanent type of anti-freeze which we secured from the Glycerine Producers Association in 1933, '34 and '35.

In 1935 we discontinued it, not by choice, but due to the fact that the Glycerine Producers Association came to us and told us that they would be no longer able to supply us with glycerine, that we would have to find another source.

[fol. 7094] Q. What did you do, if anything, at that time, 1933, '34 and '35?

A. To the best of my knowledge there were only two people that manufactured the permanent type of anti-freeze.

In the main we were taking the entire output of the Glycerin Producers Association. There was also the Union Carbide & Carbon Company that sold under the name of "Prestone."

So we immediately—they were very nice to us. I mean the Glycerin Producers Association gave us notification, and we immediately went to work trying to find a source, but the sources were limited.

The "Prestone" people felt that they could sell all they could produce anyway, and they saw no value in doing business, or at least they didn't elect to do business with Chevrolet and divide their volume.

We still felt the need because we feel the responsibility very definitely of taking care of the dealer. We then started to look around and see if we could find a source for anti-freeze. We didn't like to go to the alcohol type, but we finally went to the non-permanent type. We looked the field over and, I would say, checked every place that we possibly could.

Q. Did you make any effort to induce the Prestone people to sell to you?

A. Yes, I would say considerable effort.

Q. Did you acquire any from the Prestone people?

A. No, they—you see, you are in a shortage market at that time, and while we were hopeful that Prestone might sell us some, the facts were they felt they should preserve their entire output into—

[fol. 7095] Q. What did you do? Did you cease selling anti-freeze, or did you acquire the non-permanent type?

A. No, we did not cease selling anti-freeze, but we started out and canvassed every source that we knew, and finally after looking all of the products over that were available of the nonpermanent type, the price and the merchandising policies, we finally signed a contract with the du Pont organization.

Q. With the du Pont Company?

A. Yes.

Q. Was that for your entire requirements of the non-permanent type?

A. That was for our entire requirements of the non-permanent type.

Q. And approximately when was this?

A. That would be 1936, as I recall.

Q. Was this a term contract or an indefinite duration contract?

A. Well, our contracts with the supplier for that type of merchandise only runs for six months, and it is our responsibility—or for a season—to always review it every season with the thought of either getting a better contract or better terms in the form of price or product. We don't sew ourselves up on a long term contract.

Q. This is for one season?

A. One season.

Q. When that expired what, if anything, did you do?

A. Well, we went through the same procedure again because we still felt that we would like very much to have a permanent type of anti-freeze, that that represented to us in our channels, the largest market, and we were not successful, so we continued again after looking over all of the so-called non-permanent type, of staying with du Pont, because we felt very definitely that they gave us the best product at the best price.

[fol. 7096] Q. Now, how long did this continue?

A. Well, we handled the non-permanent type from 1936 to 1940.

Q. Was the matter reviewed each year as you have described this first year?

A. Very definitely it must be reviewed each year.

Q. What happened in 1940?

A. Well, in 1940 we were again on the—trying to get a permanent type of anti-freeze, and I might say all during 1936 to 1940 we tried each period of contract to get Prestone interested, and in 1940 du Pont developed an anti-freeze which was of the permanent type. We took

that on, and we went all through the laboratories, and it was approved by General Motors, and we added it to our line and merchandised it under our label as genuine General Motors ethylene glycol.

Q. By the way, how did you merchandise the permanent type as long as you were able to buy that up to 1936? Did you merchandise that under the manufacturer's label, or under your own label?

A. Well, under both the permanent and non-permanent types of anti-freeze it was merchandised under our label up until 1950.

Q. Now, in 1940 when you say the du Pont Company had a permanent anti-freeze, did anyone else have a permanent anti-freeze, anyone outside of the du Pont Company and the Prestone people?

A. Not to my knowledge.

Q. Did your 1940 arrangement with the du Pont Company cover only the permanent anti-freeze?

A. No, we bought both types of anti-freeze, the permanent and the non-permanent type of anti-freeze. You understand after we took on the permanent type anti-freeze, it only proved what we originally thought, that it would always be the big seller with General Motors, and so the non-permanent type was the small seller, and the permanent type immediately became the big seller.

Q. How long did you continue with that arrangement with the du Pont Company with reference to the period of the war? Did it continue until the war ended, or did it stop sooner than that?

A. No, we kept it all the way through up until the war, and then there was no permanent available for commercial uses, so we handled the non-permanent type during the war, and that continued up until about after the war, and then there was more permanent anti-freeze made available.

Q. What was the situation with reference to the available supply after the war?

A. Well, anti-freeze of the permanent type has been in more or less short supply, and of course immediately following the war it was very definitely in short supply. Du

Pont gave us an allotment based on our past war experience—that is before the war—and in turn we made allotments to our dealers in line with their past purchases, but the supply no where near met the demand in the permanent anti-freeze field.

Q. Was any effort made by your division to acquire anti-freeze from any other source after the war?

A. Well, I like to say that there was probably more effort extended than the results that we got out of it. Yes, very definitely we worked very hard trying to obtain from any source an additional supply of anti-freeze. Our results were not very good, but our efforts were really put there.

Q. For how long did this period of shortage continue?

A. Well, I would say that permanent anti-freeze has not been produced up to, in quantities, really definitely to meet the market, until the season of 1952 and 1953. Now, in 1951 maybe there was a little—about even, but even in [fol. 7098] 1951 there was a little shortage, and in all the other years there was a definite shortage.

Q. Are you still buying your anti-freeze from the du Pont Company?

A. Right now we are not buying any anti-freeze because it is not in the season, but when we buy our other anti-freeze we will not be buying it from du Pont, effective with this season.

Q. Have you contracted with anyone else for your anti-freeze?

A. Yes, sir.

Q. To what extent, if any, was your decision, if any, to contract with some other company or to change suppliers motivated by the pendency of this lawsuit?

A. Will you repeat the question?

Mr. Hurd: Will you read the question?

(Question read.)

By the Witness:

A. I don't want to plead ignorance, but frankly I have not followed this case very much, so I would say the answer was definitely—it was not motivated in any way,

shape or form. Our hope was to buy merchandise where we can at the best price.

I think the real motivation was that du Pont did not elect to sell us merchandise in our cans; and under our labels, and in 1951 and in 1952 we hunted for a source that would do that, and we found the source this year who we believe will supply our requirements.

It is, we think, a good product, and we prefer to sell under our own labels.

Q. Now, you have been discussing the purchase and sale of anti-freeze by the parts division. Was that limited [fol. 7099] to the account of Chevrolet?

A. No, the General Motors parts division on any interchangeable items such as anti-freeze, when we buy they buy for the other car divisions in the corporation.

Q. So that your purchases covered the Buick, Olds, Pontiac and Chevrolet?

A. In 1947 and 1948 the Buick, Oldsmobile, Pontiac and Chevrolet.

Q. Your purchases were limited to the anti-freeze used for resale to dealers?

A. Yes.

Q. Was any anti-freeze used in production as distinguished from what is merchandised to the dealers?

A. Yes, the production department bought some anti-freeze. You must understand the main purpose there is—all they do buy anti-freeze for is to put in a new vehicle long enough to get it into the dealer's hands, because we feel that the customer should have a choice of type of anti-freeze that he puts in, and therefore that anti-freeze is a low-priced anti-freeze, and it is just a one-shot proposition where they use it to protect the product in transit, you might say.

Q. From a dollar standpoint, is the amount purchased from production larger or smaller than what you acquire for resale?

A. Oh, it would be rather a small, a very small segment of our business.

Q. Now, Mr. Thompson, in making these contracts from time to time with the du Pont Company, as you have described from 1936 until this year, to what extent, if

any, were you motivated in selecting the du Pont Company by the fact that the du Pont Company owned the stock in General Motors Corporation?

A. Absolutely none.

Q. Did you ever hear that you were supposed to favor the du Pont Company as a supplier?

A. No.

[fol. 7100] Q. Or buy substantial parts of your requirements of anything from the du Pont Company?

A. No, I don't—no one ever even indicated to me that we should favor du Pont. When you are running a big organization, you just cannot run it with a lot of strings tied to it.

Q. Were there any strings tied to your purchases of anti-freeze?

A. Absolutely none.

Mr. Hurd: If the Court please, that completes the direct examination of this witness.

Cross-examination.

By Mr. Harsha:

Q. Mr. Thompson, on your direct examination you stated that during the year 1933, 1934 and 1935 the parts division of General Motors was purchasing this glycerine type of anti-freeze from, I believe you named it, as the Glycerine Producers Association.

A. That is right.

Q. And then some time in 1935, was it, they informed you they could not longer or would no longer sell to General Motors?

A. That's right.

Q. Did they give you any reasons as to their discontinuing their sales to GM?

A. Yes, they explained their position very definitely. As you know, glycerine, or at least I am told glycerine has two main purposes; one, it is used as explosives, and I am not too sure about this, but I am of the opinion that even the Government had a little bit to do about it, because

they elected to sell it for the production of gunpowder, or at least that was their explanation to us. It was a very friendly deal. They were very kind to us and gave us as many weeks' notification as possible.

[fol. 7101] Q. Now, I get it in the testimony, your testimony has been limited primarily to the purchases of antifreeze made by the parts division of General Motors as opposed to the production units, is that correct?

A. Yes.

Q. Now, am I to understand that production units of General Motors have used at least in the period, say, after the war, an alcohol type of non-permanent antifreeze?

A. They use an antifreeze—they do not use any permanent antifreeze in the car. The sole purpose of putting it in the automobile is—you understand, we build 400, 500, 600 cars a day in a plant, or 1,000, and the only time they use it is during the season when that car is apt to become frozen in the handling of it and getting it to the dealer. It is not all-year round job. Our southern plants put it in at one time of the year, and the northern plants put it in at another time. It is not selling; it is just protecting the automobile.

Q. Now, is this type of antifreeze of the non-permanent nature, used by the production units of General Motors, is that a methanol antifreeze?

A. Yes, I believe in the main it is.

Q. From whom do they purchase it?

A. I think from du Pont.

Q. Is there a separate contract on that?

A. Yes.

Q. Is that a requirements contract?

A. You mean a term contract?

Q. Yes.

A. Well, all of General Motors, or rather the divisions, operate on the same basis; their contracts run about six months or a season.

Q. Are they for the total requirements of the car production units, for a methanol antifreeze?

A. Well, some of that would vary by the weather. In [fol. 7102] other words, you get an open season like last

year, and it would make their contract run on a basis of their requirements.

Q. That is what I mean; it is for the entire requirements, whatever that may be, depending on the season, is that correct?

A. Yes, because no one knows about the weather.

Q. Now, is the parts division today—of let us take the period since the end of World War II, say beginning in 1946—has the parts division of General Motors been a large purchaser of methanol type of antifreeze as opposed to the permanent type?

A. No, most of our volume, and it would have been a great deal more in the permanent type of antifreeze, had we been able to secure it.

As I said a while ago, the permanent type of antifreeze has been definitely in short supply.

Q. Yes. I am confining my questions now to the methanol, the non-permanent type of anti-freeze. I am inquiring as to whether that, whether the General Motors parts division, purchases a large amount of that type of anti-freeze.

A. Well, a large share of our sales is in the permanent type of antifreeze, and I think that is perfectly explainable, if you don't mind me saying this.

You see, the car dealer services mostly the later model cars, and they are the people who, shall we say, have a little bit more money and do spend a little bit more money on such merchandise as antifreeze. They buy the better type.

So our sales on the non-permanent type was rather limited.

Q. Now, let me show you the record in this case, Gov- [fol. 7103] ernment's Trial Exhibit No. 1344, and this is a compilation prepared by the du Pont Company showing its sales by products to General Motors, and I draw your attention to the items under "Antifreeze" on the first page of the exhibit for the years 1946 and 1947.

Now, you will note that the methanol type of antifreeze purchased by General Motors was \$366,000.00 roughly, as compared to \$266,000.00 of the ethylene glycol type, and in

1947 the ethylene glycol type accounted for \$969,000.00, and the methanol type for \$740,000.00.

Now, can you tell me from those figures, Mr. Thompson, whether the great bulk of those purchases were made by the parts division or by the car divisions?

A. Now you are talking about the years of 1946 and 1947?

Q. Yes, sir.

A. Well, again in 1946 and 1947 we were limited in our purchases of the permanent type of anti-freeze. Therefore an owner didn't have his choice either. Neither did the dealer. So it would be normal, if we couldn't get the permanent type of antifreeze, to buy the methanol type of antifreeze for service, and I would say that in those years our proportion for service was a great deal higher than the normal percentage would be, by far.

Q. Well, now, were there other producers of methanol type of anti-freeze in the years 1946 and 1947?

A. Yes, there were other types. There was other people in the business.

Q. I believe from your previous testimony you indicated [fol. 7104] that you had inquired about a good deal of serving this field of anti-freeze, and trying to find other sources.

Were you aware of the fact that the du Pont Company's percentage of the entire methanol production of the country was relatively small?

A. I don't think we ever got into that as to their percentage of the industry. The way we rate a supplier is on his ability to supply us with the merchandise we need. Now, in an item like anti-freeze, I think we have all got to realize that you have to take quality into consideration, the merchandising programs of that company, as well as the price, and I will say in answer to your question that at each time that a renewal of the contract came up, we surveyed the field of the people in it.

Q. Did you ever hear of the Spencer Company as a producer of methanol type of anti-freeze?

A. Spencer?

Q. Yes, sir.

A. Yes, I believe I heard of those folks.

Q. Did you ever approach them to purchase methanol anti-freeze from them?

A. I am pretty sure they received the bid award that went out from us.

Q. Was this in 1946?

A. I would say that each year—you understand, as a manager, you cannot keep all of these names in your mind, but I am sure we leave no stones unturned, if they are a good, legitimate supplier, and as far as I know, they are—I am sure they went on the mailing list.

Q. Do you know how their product compares in price with the du Pont methanol anti-freeze?

A. You mean to us?

Q. Yes, sir.

A. No.

Q. You have no recollection?

A. No.

Q. Did you ever hear of the Cities Service as a manufacturer of methanol anti-freeze?

A. Yes.

[fol. 7105] Q: Yes?

A. Yes, I know they manufacture it.

Q. Did you ever attempt to purchase from them?

A. I am reasonably certain that again, that the bids went out, invitations to bid, as we call them, went out.

Q. Did you get a bid from them, do you know?

A. I wouldn't know.

Q. Did you ever hear of Cellanese as a manufacturer of methanol?

A. Yes.

Q. Did you solicit bids from them?

A. I am reasonably certain that they were on the list.

Q. Do you know whether you got bids from them?

A. Yes, they bid on our business.

Q. Do you know how their price compared with the du Pont price for methanol?

A. Again, on price, I don't think their price was any more favorable, but you must realize that you have got to

tie not only price, but the quality of the product and the merchandising plans, altogether. In other words, there is no advantage in buying from an organization, whether you are talking about anti-freeze or any other item, and then have the merchandising conflict in the field, or the quality not be what you would expect.

Q. Now, did you find that the methanol type of anti-freeze produced by the other major producers in the field are approximately equivalent to that produced by du Pont in terms of quality?

A. Yes; from all that I have heard in the field, most of the good names were very satisfactory. You know, of course, I imagine that you know this, during the war period anti-freeze quality got to a point where even the Government stepped in, and today you must register in a good number of states your products, so that the quality is maintained.

[fol. 7106] Q. Now, did you ever solicit bids from a producer called Commercial Solvents?

A. Commercial Solvents?

Q. Yes, during this period.

A. Yes, I remember that they bid on our business.

Q. In 1946 and 1947?

A. Yes.

Q. And did you award them any business?

A. Not—no.

Q. Do you know how their price compared with that of du Pont?

A. I don't think it was any lower.

Q. Were the prices running about the same?

A. I would say in the neighborhood.

Q. How about Union Carbide? Did you solicit them as a buyer?

A. Union Carbide, which is the Prestone—

Q. Well, aren't they also a producer of methanol?

A. We sent competitive—we gave them an invitation to bid.

Q. No. My question is do you know that Union Carbide is a producer of methanol anti-freeze?

A. Yes, they produce it, I am sure.

Q. Aren't they a large producer of methanol as well as Prestone permanent type?

A. Well, in the field I think if they have a great value it is on the basis of the words "Prestone, a permanent type of anti-freeze."

Q. Did you request any bids from Standard Oil of Indiana, do you recall, during this period?

A. Standard Oil, I am pretty sure, got an invitation to bid.

Q. And did they submit a bid, do you know?

A. Yes, I think they did.

Q. And was the contract awarded to them?

A. No, sir.

Q. Now, turning to the field of the ethylene glycol, [fol. 7107] permanent anti-freezes, who are the major producers in that field, would you say, in the period after World War II?

A. Well, Dow Chemical, Texaco, National Carbide.

Q. That is a subsidiary of Union Carbide, is it?

A. Yes. Oh, I expect there are six or seven producers.

Q. Did you ever hear of Jefferson Chemical, a producer of the ethylene glycol type?

A. Jefferson Chemical?

Q. Yes, sir.

A. No, personally I am not acquainted with them.

Q. Did you ever hear of Wyandotte Chemical?

A. Yes, in Detroit.

Q. Did you solicit them as a supplier?

A. From Wyandotte?

Q. Yes.

A. Yes. Definitely.

Q. In 1946 or '47?

A. Yes.

Q. Did they submit a bid?

A. Yes.

Q. Now, all of these companies that submitted a bid to you either for methanol or glycol, was that indication to you that they intended to sell to General Motors at the price they had specified on their bids?

A. Yes.

Q. Are you talking now after the war?

A. Yes, I would say on the nonpermanent type or the type on which they bid, it indicated they were interested in supplying General Motors and Chevrolet with anti-freeze, but as I previously explained, could we have purchased some permanent type of anti-freeze in the years 1946, '47, 1948, '49 and '50 or '51, we would have been very happy to have purchased from anyone, provided it was quality merchandise.

Q. Well, now, let me see if I understand your previous answer.

[fol. 7108] I thought you indicated that at least as far as Wyandotte and Dow are concerned, that you had sent them invitations to bid during the period 1946 and 1947 on your ethylene glycol type of anti-freeze requirements, isn't that correct?

A. Yes, they were sent invitations to bid.

Q. And didn't they submit bids on which they quoted you a price?

A. They submitted bids, but as I understand, they were not in a position to supply us with the merchandise.

Now, very often in business you get an invitation to bid, and you just don't ignore it; you certainly don't, if you are not in position to make delivery—you certainly can't kick out one customer in the shortage market and put another one in.

Q. Now, am I to understand they would submit bids to you quoting a price to you on so much ethylene glycol which they would then state they were not a position to sell you?

A. Well, the bids were never on the basis that they would deliver the goods at that time. I think they were like many other people, looking down the road that the permanent anti-freeze would not always be in short supply.

Q. Well, now, let me see if I understand—

A. Well, let me say this year, in their bids, this year they very definitely bid.

Q. What were these bids that you were issuing in 1946 and '47? For how long a period were you requesting materials?

A. The standard time, for the season which is basically six months.

Q. And did they indicate—what did they indicate on their bids to you, if they quoted you a price for the material?

[fol. 7109] A. They indicated they were not too interested in supplying us at that time.

Q. Would they then so state on their bids that "we are quoting this price, but we are not in position to supply it"?

A. I think you do that on your price, without saying anything.

Q. You mean they quote a high price?

A. Definitely.

Q. I thought I understood you to say in your earlier testimony that all of these prices were running about the same.

A. Well, you know if you understood me to say that, I don't know, but what I intended to say was that the prices on the non-permanent type were somewhere in the neighborhood of each other.

Q. But there was a range of the permanent types?

A. Yes.

Q. How great a range would you say?

A. Well, great enough range that would indicate to us that they were not too interested in the business.

Q. Now, how many producers of ethylene glycol types of antifreeze would you say there were in 1940?

A. In 1940?

Q. Yes.

A. In 1940, to the best of my knowledge, there were only two.

Q. Du Pont and Union Carbide?

A. Du Pont and Union Carbide.

Q. And when did the other companies go into the production of these methanol—

A. Largely during the war period.

Q. Did any go in before the war?

A. Not to my knowledge.

[fol. 7110] Q. Do you recall whether you made any survey around 1940 or 1941 to see whether there were other producers of ethylene glycol?

A. Yes, we made surveys very definitely.

Q. During this period after the end of the World War, what position would you say the du Pont Company occupied in the field of methanol anti-freezes, in terms of quantity of sales?

A. I wouldn't even hazard a guess.

Q. Were there others, do you know, who were larger suppliers of methanol than du Pont?

A. I wouldn't know that.

Q. How about with respect to ethylene glycol. Do you know how the du Pont Company ranged in the industry in that particular field?

A. Right immediately following the war?

Q. Yes, sir.

A. I would say they held a very nice position, but what percentage I would not know.

Q. Do you know whether they are a major factor today in the industry, or whether their position had slipped during the post-war period?

A. Oh, I think there has been lots of competition introduced into the permanent type of anti-freeze business.

Q. As I understand it, you have purchased practically no permanent anti-freeze from anyone other than du Pont until just this current year, isn't that right?

A. That is right.

Mr. Harsha: That is all. Thank you.

[fol. 7111] Redirect Examination.

By Mr. Hurd:

Q. Mr. Thompson, after the war, say 1946 to 1951, did you find any supplier who was willing to sell you both the permanent and non-permanent anti-freeze?

A. Not any supplier—you must understand that our requirements are substantial. Suppliers not only have got to meet us in price, but they have got to meet us in merchandising policies and the quality of their production must be there.

The permanent type of anti-freeze, I repeat myself again, was quite short up until last year.

Q. And in 1946 or 1947 was there any shortage of the nonpermanent type?

A. Any choice?

Q. Any shortage of the nonpermanent?

A. Shortage? Yes, there was shortage to an extent even in 1947 and 1948 of the nonpermanent type. When you take one phase of a market out you automatically create a shortage of another.

Q. When the nonpermanent type became available, was there any reason for your not buying your nonpermanent type from one supplier while you bought the permanent, which was not available generally, from du Pont?

A. Well, there is a financial deal there. Now we have 45 warehouses, and for those 45 warehouses we must take it out of a source. You understand that anti-freeze weighs quite heavy so the economical way to ship it is in carload lots on pallets.

Q. You can't ship it very well L.C.L.

So if a small share of your business comes from one supplier and a larger volume from another, it is an economical waste, you might say, to buy from one source and one from another, so there is a very definite advantage in buying it all from one source from the standpoint of handling and freight rates, and all of the other things that go with it.

Q. In connection with this recent change of suppliers that you referred to, are you buying both types, all of it, from one supplier, or are you splitting it up?

A. Yes, we are following the same policy because of the economical savings. We are buying from the one Genessee Research Company our entire requirements for the next season.

Mr. Hurd: That is all.

Mr. Harsha: Just one question.

Recross Examination.

By Mr. Harsha:

Q. This reference you have to changing your source of supply, does that go to the winter season coming up for 1953 and '54?

A. Yes.

Mr. Harsha: Thank you. That is all.

Redirect Examination:

By Mr. Hurd:

Q. Has that contract been entered into?

A. That contract has been awarded, and the delivery will start somewhere around July 15 of this year.

Mr. Hurd: That is all.

(Witness excused.)

[fol. 7113]. The Court: The court stands recessed for fifteen minutes.

(Recess taken.)

The Court: Proceed, please.

Mr. Cox: May it please the Court, the witness that we shall present this morning on behalf of the du Pont Company is a witness who, since 1930, has been engaged in the sale of the two types of anti-freeze that have been described as methanol and ethylene glycol.

The statistics offered by the Government in rebuttal related, with one unimportant exception that I shall note in a moment, solely to these two types of anti-freeze.

In the Government's case in chief, however, certain evidence was introduced that had to do with the use of ethyl alcohol as an anti-freeze, and although the Government's rebuttal does not relate to ethyl alcohol as distinguished from methanol and ethylene glycol, I shall at this time merely for the sake of completeness and so that the Court may have all the facts before it, offer in evidence two tables compiled from the records of the du Pont Company that show the sale of ethyl alcohol made by du Pont to General Motors from 1932 through 1941.

These two tables, which I believe are included in the volume of exhibits which has been given to your Honor, have been marked du Pont Exhibits 566 and 567; and I now offer those exhibits in evidence.

(Said documents so offered and received in evidence were marked du Pont exhibits Nos. 566 and 567.)

[fol. 7114] Mr. Cox: The first table I shall refer to is du Pont Exhibit No. 567, which shows du Pont sales to all General Motors Divisions. It also shows the total sales to all customers, and strikes a percentage relationship between the two.

I am sorry, your Honor. I am informed that you were not given a book.

The Court: It would be in this volume, wouldn't it?

Mr. Cox: No, these are new exhibits, your Honor.

I am sorry. I misunderstood. I thought it had been given to you. They are the first exhibits in the book, marked du Pont Exhibits Nos. 566 and 567.

Your Honor will note that the first one shows the total sales to all customers as well as the sales to General Motors, and strikes a percentage relationship between the two.

The next in the book, which is du Pont Exhibit No. 566, I believe—they are offered in reverse order—shows the sales by the du Pont Company to the five divisions of General Motors which made the largest purchases from du Pont during this period.

These sales were made throughout the period of time covered by the Organic Chemical Department of the du Pont Company, and not by the Ammonia Department.

There is one other comment I should make about these tables so that there may be no misunderstanding.

Ethyl alcohol has certain industrial uses in addition to being useful in anti-freeze. From the du Pont Company files, it is not possible for us to tell whether the ethyl [fol. 7115] alcohol sold to General Motors was used as an antifreeze or for some other purpose.

For that reason I cannot represent to the Court or to counsel for the Government that all the ethyl alcohol sales covered by these two tables represents sales of ethyl alcohol that was used as antifreeze, although we believe it

is reasonable to assume that at least a large portion of it was so used.

The tables, on the other hand, do cover absolutely all the sales of ethyl alcohol, no matter how it may have been used, that were made by du Pont to General Motors for the period of time shown in the two tables.

I think with those comments, I shall now pass on to the testimony of the witness.

We will call Elmer F. Schumacher.

ELMER F. SCHUMACHER, called as a witness on behalf of the defendants, in sur-rebuttal, having been first duly sworn, was examined and testified as follows:

Direct Examination.

By Mr. Cox:

Q. You are Elmer F. Schumacher, is that right?

A. Yes, sir.

Q. You live in Wilmington, Delaware?

A. Yes, sir.

Q. And you are now the sales director of the Poly Chemicals Department of the du Pont Company?

A. That is correct.

Mr. Cox: Try to keep your voice up.

By the Witness:

A. That is right, yes, sir.

[fol. 7116] By Mr. Cox:

Q. Does that department handle sales of anti-freeze materials for the du Pont Company?

A. It does, yes.

Q. What type of antifreeze does it sell?

A. The methanol and ethylene glycol type.

Q. Has it at any time since you have been connected with the department sold any other type of antifreeze material, Mr. Schumacher?

A. Well, yes. For one short period during the war, we

were allotted by the authorities in Washington a certain amount of ethyl alcohol to sell to replace—

Q. Except for that short period during the war, the department did not sell ethyl alcohol as an antifreeze?

A. It did not.

Q. In Government Trial Exhibit No. 1344, which was shown to you or which I think you have seen, Mr. Schumacher, which is a return made by the du Pont Company in response to a Grand Jury subpoena, you will note that in the year 1946, in addition to sales of ethylene glycol and methanol type of anti-freeze, there is an entry that indicates that roughly \$35,000 of the ethanol type was sold. Is ethanol the ethyl alcohol to which you referred to in your previous answer?

A. I am sure it is, yes, sir.

Q. Why was it during that period that you were allotted ethyl alcohol for use as anti-freeze? What is the explanation for that?

A. Solely to preserve our business, I think, in taking care of the outlets we had established over the years.

Q. Was there a shortage of the other type?

A. A very great shortage. Methanol was almost entirely removed from the market.

[fol. 7117] Q. Mr. Schumacher, when did you first go to work for the du Pont Company?

A. Oh, in the late twenties. I was with a subsidiary, what came to be a subsidiary, the National Ammonia Company in their New York office.

Q. When did you first have anything to do with the sale of antifreeze?

A. In 1930.

Q. What department of the du Pont Company were you employed in at that time?

A. I went into the ammonia department.

Q. Was that the department that at that time was selling antifreeze materials?

A. Yes, sir.

Q. How long did the ammonia department continue to sell antifreeze materials?

A. Until it became a part of the polychemicals department.

Q. What date was that, roughly; what year?

A. 1949.

Q. After that what department handled the sale of anti-freeze?

A. The polychemicals department.

Q. Have you been engaged, or have your duties related to the sale of antifreeze from 1930 until the present time?

A. Well, my duties were devoted entirely to antifreeze until about 1944, early 1944.

Q. What change occurred in your duties at that time?

A. I was then made assistant director of sales of the then ammonia department.

How long did you hold that position?

A. I continued in that capacity for about two years, until 1946, when I was made director of sales of the ammonia department.

Q. Then when the polychemicals department was organized?

A. I became director of sales of the polychemicals department.

[fol. 7118] Q. As assistant director of sales and director of sales of the ammonia department, and as director of sales of the polychemicals department, do the sales of anti-freeze fall under your general jurisdiction?

A. They do.

Q. Mr. Schumacher, what is methanol, in layman's terms?

A. Methanol is a term that grew to be applied to, after it was made synthetically and in large volume, grew to be applied to methyl alcohol, which was also sometimes known as wood alcohol, sort of a contraction of the words.

Q. Do you know how long the du Pont Company has been producing methanol?

A. We have been producing methanol since 1929.

Q. Do you know for what uses du Pont was selling methanol in the period of time up to 1929?

A. When we first came into production of methanol, we sold it for a multitude of industrial, or what we called miscellaneous uses. There was a great variety, no one of them important in itself.

Q. When did the du Pont Company first begin to sell methanol extensively as an anti-freeze material?

A. Well, they made a pass in it in the latter part of 1929, but really made an effort at the beginning in 1930.

Q. That was the year that you first went to work in Wilmington, was it?

A. That is right.

Q. And was that the first year that you had anything to do with the sales of anti-freeze material?

A. That is the first I had anything to do with it.

Q. What was your first job in that connection? What did you do?

A. Well, my assignment was to build up the volume of [fol. 7119] sales of methanol, and the largest potential market appeared to be the anti-freeze market, so my job became one of specializing in the sale of methanol in the anti-freeze market to get a piece of the huge amount of business that was dominated by ethyl alcohol at the time.

Q. Why was the company, if you know, interested in building up the market for methanol?

A. We were large producers of methanol. We were turning out a great deal of it.

Q. Did the company use any methanol in its own production processes?

A. Yes, we used some.

Q. Did it produce methanol in excess of its own needs?

A. Much in excess of our own needs.

Q. Tell exactly what you did to build up a market for methanol as anti-freeze material.

A. In 1930?

Q. Yes.

A. Well, we thought that we had in methanol a material that was inherently cheaper to make than competitive anti-freeze materials, and we set about selling it in bulk to large buyers. They had to be large buyers to take it in bulk. Our preference was to sell it in tank cars, and also at a price. We deliberately undertook to undersell the market.

Q. You say undersell the market. What commodities in particular were you trying to undersell?

A. Our chief competition was ethyl alcohol, and we thought we could successfully maintain or consistently maintain rather a price somewhat below the so-called going market price for ethyl alcohol.

Q. Both ethyl alcohol and methanol were what has sometimes been described as a non-permanent type of antifreeze, is that right?

A. They have been so described, yes, so regarded.

[fol. 7120] Q. Will you please show the witness du Pont Exhibit No. 556?

Mr. Cox: At this time I should like to offer in evidence the third document in the book which was given to your Honor this morning, which has been marked du Pont Exhibit No. 556 for identification.

This is a table showing sales of anti-freeze by the Ammonia Department covering the years 1930 to 1948, inclusive.

(Said document, so offered and received in evidence, was marked du Pont Exhibit No. 566.)

By Mr. Cox:

Q. Mr. Schumacher, will you tell us, if you know, whether this table covers all sales of antifreeze material that were made throughout this period of time by the Ammonia Department?

A. Yes, sir, it does.

Q. So it would include both the temporary and the permanent types of antifreeze throughout this period that have been sold?

A. Both the permanent and non-permanent, yes, sir.

Q. And to the extent that during the war period you say sales were made of ethyl alcohol for antifreeze, they are reflected in this statement?

A. They would be in this tabulation, yes.

Q. This exhibit, Mr. Schumacher, shows that in 1930 you sold in gallons 1,811,000 gallons of antifreeze material to all customers, and the sales continued from the period 1930, '31, '32 in each of those years, to be less than two million gallons, and in 1933 they rose to 1,979,000.

What efforts were you making during those years, to [fol. 7121] wit, 1930 through 1933, to sell methanol as an antifreeze

A. We were following the policy I have already described as seeking large customers, people who could take in large volumes at a price.

Q. Thereafter did you change in any way your selling policy?

A. Yes, sir. In 1934 we made a great change in our plans.

Q. What did you do in 1934?

A. Well, during the years you have already mentioned, 1930 through 1933, we had grown quite unhappy about our profits, or rather the lack of them. We weren't too happy about the progress we were making volume-wise.

We had been doing a little investigating among automotive wholesalers to check up on the possibility of selling antifreeze to them and that looked promising. So we completely changed our plans for selling antifreeze in 1934. We adopted a trade mark—

Q. What was that trade mark?

A. Zerone. We decided to forsake the bulk sales and go into small packages, so we packaged it in drums, gallon cans and quarts.

We had been successful in developing a formula for including in the Zerone an inhibitor which, by the way, we obtained a patent on, which protected the cooling system against the corrosion caused by water.

We developed a merchandising plan and sales plan and a national advertising plan, all of them calculated to attract the favorable attention of wholesalers and retailers alike, through whom we had to go to reach the ultimate customer.

Q. When would you say this program was put into effect?

A. We put it into effect in 1934, with the season that begins then, the 1934-35 season.

[fol. 7122] Q. Did you personally participate in the organization and promotion of this program?

A. Very much.

Q. What did you do?

A. Well, I organized a program, and once we got it instituted went out in the field with salesmen and interested, or sought to interest, wholesalers in taking on the idea.

I might add, by the way, that it was necessary to build up a structure whereby they would take it in carload lots.

Q. Did your sales of anti-freeze thereafter increase in amount?

A. Very markedly. This record, if I may refer to it?

Q. Yes, sir, certainly.

A. This record shows that in 1934 we increased our sales to 2,742,000 gallons. We went in 1935, the next year, to four million eight; and in 1936, five and a half, and so on. Our sales increased steadily and our profit position took a very satisfactory turn. Indeed, we felt that by 1935 we had established a merchandising success.

Q. That year, in your opinion, marked the successful culmination of this program?

A. Yes. We may have had some doubts about it in 1934, but we had no doubts whatsoever by the time we finished the 1935 season.

Q. I should now like to direct your attention to the question of your sales to General Motors in this early period.

I direct your attention to the fact that du Pont Exhibit No. 556 shows that in 1930 you made no sales of anti-freeze to General Motors Divisions. Does that accord with your recollection?

A. Yes, sir. We made no sales in 1930. We made no sales to General Motors as a matter of fact at all until 1936.

Q. In this connection I should like to have the witness [fol. 7123] shown Defendants' Trial Exhibit No. GM-154, and specifically page 50 of that exhibit.

Mr. Schumacher, this is an exhibit offered in evidence by counsel for General Motors, and it is a summary of contracts approved by General Purchasing Committee of General Motors.

On page 50 of this exhibit, which I believe you have before you, you will note that toward the foot of the page there is an item with a red line underneath it, reading in part a description of the item, which starts with the date "6/18/30," it says:

"Anti-freeze methanol,"

under the heading "Product contracted for," and under the heading "Supplier," it says:

"Western Rosin & Turpentine Company."

There is a note at the foot of the page that says:

"Red line signifies contract with du Pont."

The question I now put to you is whether you had any part in any negotiation of any contract between General Motors and the Western Rosin and Turpentine Company in 1930.

A. I recall no part in that. I came to Wilmington, as I think I said before, in 1930. Actually it was the early part of June.

Q. You did not get to Wilmington until June, 1930?

A. No, I did not.

Q. Do you have any recollection of any kind about any contract of this sort?

A. I have no recollection of it.

[fol. 7124] Q. To your knowledge in 1930 or 1931, did General Motors use any methanol as antifreeze material?

A. 1930 and '31?

Q. Yes.

A. No, sir, they didn't, so far as I was informed. They told me that they didn't.

Q. What kind of antifreeze material were they using at that time, if you know?

A. In the contacts I had with them, soliciting their business, that is for their production line, they told me that they used ethyl alcohol.

Q. Had you ever been told or heard that they were using glycerine as a resale item at that time?

A. As a resale item?

Q. Yes.

A. I learned that later, yes.

Q. Du Pont Exhibit No. 556 also shows that in 1931 no sales were made to General Motors, and in that connection I should like to call your attention to another exhibit that has been offered in evidence by counsel for General Motors.

Will you please show the witness General Motors Exhibit No. 155, and specifically page 22?

This is an exhibit, Mr. Schumacher, which is headed "General Motors Corporation, summary of products rejected by general purchasing committee," and toward the foot of page 22 you will note that there is an item with a red line underneath it.

Under the heading, "Date of Action," the date 8-11-31 appears, and under the heading, "Product Rejected," the words "antifreeze Methanol" appear.

Under the heading "Supplier" the words, "E. I. du Pont" appear.

Under the heading, "Remarks," the words appear, "No price advantage."

[fol. 7125] Now, do you recollect whether you had anything to do with the attempts to negotiate this contract with General Motors?

A. My recollection with regard to it is very hazy. We had made a number of attempts to sell them, unsuccessful attempts. This may have been one of them.

Q. You have no more definite recollection than that?

A. No, sir.

Q. Do you recollect anything about the price you quoted to General Motors at that time in an attempt to get the contract?

A. Well, in that period we were seeking to adhere to this policy of underselling ethyl alcohol, and tried always to do that, but that did not mean that in specific instances they wouldn't undersell us for a particular piece of business.

Q. Du Pont Exhibit No. 556, Mr. Schumacher, shows that the first year in which any sales of antifreeze material were made to General Motors was in 1936.

Prior to that time, did you make any attempt to sell antifreeze materials to General Motors?

A. Yes, for their production line we made consistent attempts.

Q. Were you ever successful in selling them?

A. Not for their production line, no sir.

Q. The exhibit also shows that in 1936 you made your

first sales of methanol antifreeze material to General Motors.

Was that methanol you sold to General Motors at that time?

A. That was methanol in 1936, yes, sir.

Q. Can you tell us what the circumstances were that led to those sales?

A. Yes. By 1936, the early part of 1936, we had been [fol. 7126] adding to our sales force, of course, and we had a man by that time located in Detroit. Through him I recall being told that this glycerin antifreeze that we had learned General Motors had been reselling was being withdrawn from the market, and that the prospects might be ripe to get them interested in our material.

That seemed to be the case, so I went to Detroit to General Motors, seeking to interest them in this resale business, because I thought I saw two things: One, an opportunity to enlarge our sales of methanol, and the other an opportunity to broaden the distribution of our trade mark material, Zerone. Those were my primary objectives.

Q. Let me ask you this, which perhaps I should have asked you a little while ago. You have mentioned that you had a trade mark on your methanol antifreeze, which was the trade mark Zerone?

A. Yes, sir.

Q. And you mentioned that you conducted a national advertising campaign as a part of this merchandising program that began in 1934, is that right?

A. Yes, sir.

Q. What part, if any, did the trade mark have in the national advertising campaign?

A. We thought a very important part. It identified our material through to the consumer to whom our advertising was directed.

Q. Now, directing your attention again to this period of time in 1936, what did you personally do about the General Motors situation; if anything?

A. I went out there a number of times on a series of visits, seeking to interest the personnel in these ideas I have

already mentioned, particularly to interest them in selling our Zerone.

I found that the people to talk with were concentrated in the Chevrolet Division, so I devoted my efforts right there.

[fol. 7127] As I say, I tried to interest them in selling Zerone. Well, they had a number of years of experience selling this glycerine antifreeze, as they pointed out to me, under their own brand name, and they preferred to do that, didn't want any part of my Zerone story, and it got to the point where I reached an impasse, and was told then quite pointedly that if I wanted to get any business at all, I would have to deal with them on the basis of their own brand.

By that time I had gotten some idea of the volume really involved, and I felt I couldn't forego the opportunity to enlarge our sales of methanol, so I capitulated and agreed to supply them their own brand of antifreeze.

Q. Did they say to you what they intended to do if you didn't agree to sell them your methanol for distribution under their brand name?

A. They made it quite clear that they wouldn't buy.

Q. Did you thereafter make an arrangement with them under which you supplied them anti-freeze to sell under their brand name?

A. Yes, we worked out an arrangement. It involved our drawing up a formula, working up a formula for them, helping in the design of the packages, procuring packages, drums, cans, cartons, and so on, and filling them for them. In short, selling them a complete product, f. o. b. our plant.

Q. Packaged for their use, bearing their trade mark?

A. Packaged for their use, bearing their name.

Q. Was this a term arrangement, Mr. Schumacher? Did it last for any specified period of time?

A. Only one season. There was no commitment beyond that.

Q. Did you undertake to supply them with their total [fol. 7128] requirements of anti-freeze for resale for that season?

A. For resale, yes, for that season. They pointed out, by the way, that they were dealing also for three other divisions of the company, the Pontiac, Oldsmobile and Buick Divisions, and I understood that when I finally completed negotiations for this private brand, as we called it, or their own brand, that that would include the activities or the resale business of these other divisions.

Q. This arrangement was confined entirely to anti-freeze that was to be resold by General Motors, is that right?

A. Entirely to that.

Q. It had nothing to do with the anti-freeze that was used on the production line, is that right?

A. Nothing at all.

Q. I have now taken you through this story to the year 1936 when this arrangement was made. Up to that time were you selling anything except methanol as an anti-freeze?

A. No, sir.

Q. Did the time come thereafter when you did develop another type of anti-freeze?

A. Yes, sir. By 1939 the research people in the company had developed a new method or a new process for making the ethylene glycol, using methanol as a raw material.

Q. Ethylene glycol is a type of anti-freeze sometimes described as a permanent type, is that right?

A. Permanent type, yes, sir.

Q. What did you do about marketing this permanent type of anti-freeze, the ethylene glycol?

A. Well, we thought, as I have said before, that we had a merchandising success in "Zerone," and a plan that appealed to the wholesalers and retailers and to the public as well, at least a product that appealed to the public.

[fol. 7129] We could think of no better scheme than to market ethylene glycol in essentially the same manner as we were marketing "Zerone," and we set about then adopting a trade mark for it, "Zerex," by the way, and applied the same principles to its distribution that we had demonstrated successfully in the case of "Zerone."

Q. Did you advertise this trade mark "Zerex" as the name for ethylene glycol?

A. Yes, sir.

Q. Was that advertising done on a national scale?

A. Yes, sir.

Q. When did you start this merchandising program for the ethylene glycol type?

A. We announced to the trade in 1939 that we were going to be out with this brand of anti-freeze the following season, so that our actual selling activities began in 1940.

Q. Did you sell any of the ethylene glycol to General Motors?

A. Yes, we did.

Q. How did that come about?

A. Well, we had known for some time that General Motors had been seeking a so-called permanent antifreeze to be sold under their own brand, and we had had this experience by that time, about four years experience with them selling them or supplying them with their own brand of methanol antifreeze, so it seemed perfectly logical to continue supplying them or to start supplying them at long last the permanent type or ethylene glycol antifreeze, under their own brand name, and we set up the same general scheme for supplying that that we had established with them for the methanol business.

Q. At this time, roughly in 1940, how many companies [fol. 7130] in this country, if you know, were producing ethylene glycol?

A. When we got into it there were only two, ourselves and the Carbide group.

Q. Referring to the group of companies designated generally as Union Carbide?

A. Yes, sir.

Q. Now, this arrangement that you have just described with General Motors on ethylene glycol, was that again an arrangement with respect to antifreeze that was to be re-sold by General Motors?

A. That was our understanding, the same as the other cases.

Q. Mr. Schumacher, I should like to turn your attention to the use of antifreeze on the production line. Do you

recall when you first sold General Motors any methanol for use on the production line?

A. Well, when we finally made this arrangement in 1936 for their reselling methanol antifreeze under their own brand name, it looked to me as though we had at long last gotten a toehold here in that the corporation would have to accept, or certainly should accept, methanol as an antifreeze.

I assigned our representative in Detroit then to the job of getting the production line business, and he succeeded in 1936 in lining up one unit, the Pontiac unit, to buy our methanol antifreeze for their production line.

Q. Was antifreeze used in the production line bought centrally in General Motors, if you know, or was it bought by the separate divisions?

A. It was bought by the separate divisions.

Q. In 1936 did you get business from any division other than Pontiac?

A. No, none other that I recall.

Q. Let me ask you this question: Was the arrangement [fol. 7131] made with Pontiac in 1936 an arrangement under which du Pont supplied that division's total requirements for antifreeze for production line purposes?

A. I don't think I am entirely clear as to that. My best recollection is that corporation signed so-called requirements contracts, but I don't know that I ever knew exactly what that meant. The only interpretation we could put on it was that they would buy from us what they chose to buy of our material.

Q. Are you referring to a contract that was a contract for the buyer's requirements of seller's make?

A. I can't recall the exact wording, but that was the sense of it; that we undertook to supply the buyer's requirements of our particular material, however, it was described.

Q. Tell me this, Mr. Schumacher, was the contract for a term?

A. They were always term contracts.

Q. For a season or longer?

A. Usually for a season, yes.

Q. Now, directing your attention to the year 1937, did you keep this Pontiac business in that year?

A. 1937?

Q. Yes.

A. Yes, I think we did.

Q. Did you get business from any other division for production line antifreeze in 1937?

A. I believe that was the year we added the Oldsmobile unit.

Q. Did you get any other units in 1937 except Oldsmobile?

A. No, sir, I don't recall any.

Q. Directing your attention to the year 1938, did you get business from any additional car unit of General Motors in that year?

A. Yes. In 1938, at long last we cracked the Chevrolet business. We thought we would get it first, but it took us three years to get in there.

[fol. 7132] Q. Had you been trying to sell Chevrolet before that time?

A. You bet, yes, sir.

Q. You had been trying for three years?

A. Well, we made our most strenuous efforts beginning with the resale deal in 1936, but we had no luck with Chevrolet until 1938.

Q. Did you in this period up to, say, 1941, ever get any business for production line antifreeze from either the Buick or the Cadillac Divisions?

A. No. We didn't supply Buick or Cadillac anything until postwar.

Q. Did you solicit those divisions?

A. Yes, sir.

Q. What happened to the antifreeze market and supply during the war period, Mr. Schumacher, roughly from 1941 until 1945?

A. It became extremely short and went on allocation. It was really distributed by the War Production Board, and the situation as between supplier and purchaser was pretty well frozen.

Q. I should like to direct your attention to the post war years, and particularly to the supply situation in those years. I shall ask you about each of the years separately.

First, take the year 1946. What was the situation as to the supply of antifreeze materials in that year?

A. It was extremely short.

Q. Would your answer apply both to methanol and ethylene glycol?

A. Both types were short.

Q. In 1946, was there any change in your relations with any of the car units of General Motors? Did you get any additional business from any of them?

A. I was about to mention before, that was the first year we got the Buick business, and the Cadillac business, 1946.

[fol. 7133] Q. In 1946?

A. Yes.

[fol. 7134]

Direct Examination (Continued).

By Mr. Cox:

Q. Mr. Schumacher, I think when we adjourned for lunch you just testified that in 1946 the du Pont obtained the business of Buick and Cadillac for production line anti-freeze?

A. Yes, we had.

Q. Was that the first time you had had that business?

A. That was the first time we had had the business of those two units.

Q. Do you know whether any representative of Buick or Cadillac or both told du Pont at that time why they were giving them the business the first time?

A. I don't recall that we were told by them why.

Q. Now, I direct your attention to the year 1947. What was the supply situation in that year?

A. It continued to be very short.

Q. Did the shortage exist as to both methanol and ethylene glycol?

A. Both types.

[fol. 7135] Q. Was there any change in the amount of business that you did with General Motors during that year? Did you get any new business?

A. 1947, no, I recall no significant change.

Q. Now, what was the supply situation in 1948?

A. It continued to be in short supply of both types of antifreeze.

Q. Was there any change in the business you had with General Motors in 1948?

A. Well, in 1948 there was a little change, yes. We had—we that year succeeded in getting one of the units in the resale activities to take on our Zerone and Zerex brands, and forsake the General Motors private brands.

That was the Oldsmobile unit.

Q. Was that the first time that any unit of General Motors had bought your private brand for resale?

A. That was the first time any unit bought our nationally advertised brand.

Q. Your nationally advertised brand?

A. Yes, sir.

Q. Before that time all of the units had been buying your products and selling them under General Motors' private brand?

A. That is correct.

Q. This change occurred both as to Zerone and Zerex?

A. They took them both on, yes.

Q. Now, in 1949, what was the situation so far as concerned supply?

A. In 1949 there was a slight easing in the supply of antifreeze generally.

Q. Did that easing relate to both types or only to one type?

A. Well, more so with regard to the low-priced or non-permanent than it was with regard to the permanent.

Q. Was there a slight easing as to the permanent type?

A. We thought so, yes.

[fol. 7136] Q. Now, did any changes occur in your negotiations with any of the units of General Motors in 1949?

A. Yes, 1949, the Chevrolet production unit told us that they were going to give approximately half of the business to competition, and I think that was the year also that we lost the Cadillac production line business.

Q. Did the Chevrolet people tell you what competitor they were going to give that fifty percent of this production line business to?

A. My recollection is fairly clear as to that one. They told us they were giving it to William S. Gray & Company.

Q. And did they, if you know, during that season get half of their requirements from W. S. Gray & Company?

A. It turned out they did not, when the season got along and it was time for them to get shipments from the competition, they fell down on them, and Chevrolet had to come back to us.

Q. You say they fell down?

A. The supplier, William S. Gray.

Q. How do you know that?

A. Because Chevrolet told us they were unable to get shipments and would we help them out.

Q. And did you supply them with the material?

A. We did, yes.

Q. Now, I think you testified also in this year of 1949 that you lost the production line business of Cadillac, is that right?

A. Yes, sir.

Q. That was the business for the 1949-1950 season?

A. Yes, that would be it.

Q. Now, directing your attention to the year 1950, what was the supply situation in that year?

A. Well, in 1950, in June, wasn't it the Korean incident [fol. 7137] took place—and with that the whole supply situation with regard to antifreeze became as tight as it ever had been. It was in as short supply as it had ever been, both types.

Q. What change, if any, occurred in your relations with any of the units of General Motors in 1950?

A. Well, in 1950 we renewed our contract with Chevrolet for production. I think that was the only change in production and in the resale; it was 1950 that we succeeded in inducing Pontiac, who had observed the Oldsmobile divisions now for two seasons selling Zerone and Zerex, and we induced Pontiac to join in that same activity—that is to buy and resell our own Zerone and Zerex rather than the GM brand.

Q. So in that year there were two units of General Motors buying your brands of materials for resale, and selling them under your brand name, is that correct?

A. That's right.

Q. In connection with both the Oldsmobile and Pontiac change, which you testified about, did they first suggest that they would be willing to sell under your brand name, or did you suggest that to them in the first instance?

A. I think we were the instigators of that move.

Q. Now, in the year 1951 what was the situation as to supply?

A. 1951, both types of antifreeze continued in short supply.

Q. What change, if any, occurred in your relations with any of the General Motors units in 1951?

A. Well, that marked a big change in our relations with them, dealing first with the production line, I think, that was the year that we got Cadillac back on our books, and that was the year dealing now with resale, that was the year we had to tell the Buick and Chevrolet people that we would have to discontinue the private brand, their own [fol. 7138] brand, and urged them to take on Zerone and Zerex. Our business had grown so in volume that—and it was necessary whenever we made their private brand to stop operations on Zerone and Zerex, resulting in a penalty in production, that we felt that we just had to insist on their going to Zerone and Zerex.

Q. What did they say when you told them that you would no longer sell them your materials for resale under their private brand?

A. Well, both units objected very strenuously and reminded us of their experience with their own brand and

their strong purpose to continue, but as I have already said, we felt that we were in a position that we just had to change, and they finally reluctantly acquiesced, telling us that if ever an opportunity was afforded them to get their own brand, they would certainly do it.

Q. They told you if ever an opportunity came to them when they could get their own brand, they would do it?

A. Yes, sir.

Q. What did you understand that to mean?

A. Either that we would have to capitulate again, or they would go somewhere else.

Q. What kind of opportunity did you understand they were waiting for?

A. Well, in 1951 the opportunity would have had to be one where some supplier had enough to sell them.

Q. Did they find another supplier in 1951-1952 season?

A. Apparently they did not, because they went along with us.

Q. Now, as to the year 1952 what was the situation so far as concerns supply?

A. The supply situation for both types of antifreeze continued to be short.

[fol. 7139] Q. Was there any change in your relationship with General Motors during 1952?

A. I recall none in that year.

Q. Now, finally coming to the current year, 1953, so far in this year what has been the supply situation?

A. It is quite the reverse of the years we have just been talking about, antifreeze of all types is in very easy supply. There is plenty of it.

Q. And has there been any change in your relations in General Motors so far this year?

A. Yes, sir, we have lost the resale business of Chevrolet, Buick and Pontiac, and we think we have retained the resale business on the "Zerone" and "Zerex" basis of the Oldsmobile unit.

Q. That is the resale?

A. Resale is all.

Q. Has there been any change in the production line business so far with you?

A. The production line business to the best of my knowledge is not yet fully settled for 1953-54 season. We think

we have the Chevrolet business, and I believe the Oldsmobile business. I think the Oldsmobile business is lined up, but I am not sure about that.

I think I am wrong. I think that it is Chevrolet and Cadillac that we have lined up.

Q. That business is ordinarily awarded later in the year than the resale business is?

A. Oh, yes.

Q. Now, throughout this period of time that your testimony has covered, Mr. Schumacher, what procedure have you followed in the du Pont Company in respect to submitting bids? How has that been done with General Motors?

A. Well, each year at an appropriate time of the year, we go to either the production units or to the resale group, [fol. 7140] and have quoted them our prices for the ensuing season.

Q. Have you been invited to submit those bids, or do you volunteer them?

A. Well, I think I would say we volunteered.

Q. And has any period of time elapsed between the time you submit the bid and the time the bid is awarded?

A. Oh, yes.

Q. Have you, throughout this period of time, ever had an arrangement either for production line anti-freeze, or for anti-freeze for resale with General Motors or any of its units that extended for more than one season in point of time?

A. No, sir.

Q. Mr. Schumacher, I should like to ask you a few questions about other producers of antifreeze material.

In the period between 1936 and 1941, do you have that period in mind?

A. Yes, sir.

Q. Can you tell us what companies in this country were producing methanol in substantial quantities?

A. Well, besides ourselves there was Commercial Solvents, Carbide and Carbon Chemicals Corporation—those were the principal ones. I think somewhere in that period City Service was producing a relatively insignificant amount.

Q. In this period that I am asking you about, from 1936

to 1941, did Union Carbide ever buy any methanol from the du Pont Company?

A. Yes, sir.

Q. Were those purchases frequent or infrequent, do you remember?

A. Oh, I think they were fairly consistent for a period of years.

Q. Were they for small quantities?

A. No, I think we would regard them as large quantities.

[fols. 7141-7145] Q. Did Commercial Solvents throughout this period, 1936 to 1941, ever buy any methanol from the du Pont Company?

A. Yes, they too bought from us.

Q. Did they buy fairly consistently throughout the period, if you remember?

A. I think they did.

Q. Did they buy in small quantities or in large?

A. We would regard them as substantial.

Q. I think that you testified, did you not, earlier in your examination, that up to 1940 the only two companies in the country that were producing ethylene glycol were du Pont and Union Carbide, is that right?

A. Yes, sir.

[fol. 7146] Cross-examination.

By Mr. Harsha:

Q. Approximately how many major producers would you say there are of the methanol type antifreeze today?

Mr. Cox: May I have the question?

By Mr. Harsha:

Q. Approximately how many major producers or major sellers, if that makes it easier for you—

A. That simplifies it.

Q. Of the methanol type antifreeze are there today?

A. If I may emphasize sellers, and begging the question with regard to major for just a moment, I think there are

probably fifty, sixty, seventy-five sellers of methanol antifreeze today.

Q. Am I to understand from that that many of these sellers have a common source?

A. Yes, sir.

Q. For the ethylene glycol?

A. You said—

Q. For their methanol, pardon me.

A. Yes, sir.

Q. Do you have any idea how many major producers of methanol there are today?

9. Yes, today there are probably six or seven.

Q. Now, I would like to go back to your testimony, Mr. Schumacher, on this period when you first joined the ammonia department, I believe, in 1929 or 1930?

A. 1930.

Q. I gather from the exhibit that was put in, I believe just prior to the time you took the stand, du Pont Exhibit 556, the figures indicate that the ammonia department was not selling antifreeze to the General Motors units in the years 1930 through 1935?

A. That is correct.

Q. Do you know what General Motors units were using as an antifreeze during that period?

A. In production?

[fol. 7147] Q. Well, let's take production first, in the production lines, first.

A. In their production we were informed they were using ethyl alcohol or denatured alcohol, one and the same thing.

Q. Do you know from whom they were purchasing it?

A. No, I do not.

Q. Were they buying any of it from the du Pont Company, do you know?

A. They may have been. I didn't keep myself informed as to the sales of ethyl alcohol by the other departments in the company.

Q. How about in respect to the so-called resale aspects of General Motors' business during this period?

A. Well, the first I became acquainted with their resale activities, they were selling glycerin, a glycerin base anti-freeze.

Q. Did that continue up until the end of 1935?

A. Yes, sir.

Q. In 1935 they withdrew from that type of anti-freeze?

A. Yes. We understood it was withdrawn from them, that the Glycerin Producers Association had taken it off the market.

Q. How long did the production line units of General Motors continue to use the ethyl alcohol as an anti-freeze, if you know?

A. Well, we thought when we got the business of the Pontiac unit, when we first got that in 1936, that we got essentially all of their business. That would leave in 1936 all the other units using ethyl alcohol.

If we are correct further that in 1937, when we acquired the Oldsmobile business and retained Pontiac, that would leave the other units using ethyl alcohol. And again, if we are correct in our assumption that when we got Chevrolet in 1938 we got essentially all the business in that [fol. 7148] year, and we did retain Oldsmobile and Pontiac, that would leave all the other units continuing with ethyl alcohol and so on, until we took them on, one unit at a time.

Q. During that period of time, were you acquainted with who was supplying the ethyl alcohol to these various production line units?

A. I never concerned myself with it.

Mr. Cox: You are aware, I take it, Mr. Harsha, that my exhibit shows the du Pont sales to those divisions?

Mr. Harsha: Yes, I understand. I also take it that this is not a breakdown, though, as between ethyl alcohol used for other than antifreeze purposes in that period.

Mr. Cox: No, but it is all the ethyl alcohol for any purpose sold by du Pont.

By Mr. Harsha:

Q. During this period between 1930 and 1935, did you make any attempt to sell methanol antifreeze to the Ac-

cessories Division or the so-called Resale Division of General Motors?

A. I don't recall too accurately, sir. I think we made some attempt during the latter part of that period. I don't think we made any real attempt in the early portion of it.

Q. They were not what you would consider all out vigorous attempts?

A. You are dealing with the period 1930 through 1935?

Q. Yes.

A. The early part of that period, we were selling a commodity at a price, if you understand what I mean, and we didn't think we had anything to sell General Motors for resale.

When we thought we saw the merchandising possibilities in the product, we began to talk, and when we established [fol. 7149] the merchandising possibilities, we were very much interested.

Q. You mentioned that a number of the years—I believe shortly prior to the war and during World War II and in the years immediately thereafter—you were asked a number of questions as to whether anti-freezes of both types were in short supply.

A. Yes, sir.

Q. I believe the gist of your testimony was that it had been in short supply.

A. Yes.

Q. Now during that period, do you mean by that that there was no changing around among customers for their sources from which they were buying antifreeze?

A. Very little that came to my attention, if any.

Q. How about other car companies? Did they change around any?

A. I really don't know.

Q. Did you sell any antifreeze to any other than General Motors?

A. Yes.

Q. What company?

A. Well, we sold antifreeze to Nash. In that case we sold it as Zerone. We sold it for production line purposes, and got them to so label it as Zerone in their cars.

We sold antifreeze to Mack Truck. I think we sold some to Autocar. Diamond T, I think, was a customer.

I am not sure myself with regard to other passenger car manufacturers. We may have supplied some to Hudson and possibly to Studebaker.

Q. Is this during the period after the end of the war?

A. Yes.

Q. Did you have any of those customers before the war?

A. Some of them.

[fol. 7150] Q. Did you gain some after the war?

A. I am afraid I can't answer reliably as to the dates in each case.

Q. I am not going to pinpoint a precise date, but did some of these customers you just mentioned, did you pick them up after the war?

A. I doubt it very much, although I am not sure.

Q. I believe you mentioned that you didn't get the Cadillac production line business, if I understood you, until about 1946, is that correct?

A. That is about right.

Q. Can you tell us who were supplying Cadillac with their antifreeze prior to that time?

A. No, I don't know.

Q. How about the Buick that you got the same year? Do you know who had been their supplier?

A. No, I don't know who was the supplier before.

Q. I believe you stated in 1949 that you lost half of the Chevrolet business to William S. Gray, but that they didn't make apparently adequate shipments, and so you regained the business, is that right?

A. That is essentially correct, yes, sir.

Q. I think you also mentioned losing Cadillac. To whom did you lose Cadillac?

A. I don't know for sure. I assume it might have been the same source of supply, but I am not certain myself.

Q. Has there been any great difference or great increase in the industry's production of all types of antifreeze between the years 1951 and 1952?

A. No, I don't think there has been a great increase in production in those two years.

Q. Now, how about the following year, 1953?

A. I don't think so then either.

Q. About the same?

A. Approximately.

Q. As I understand it, 1953, is more or less easy supply for antifreeze?

A. Yes, sir.

[fol. 7151]: Q. In regard to this bidding procedure that you discussed on your direct, do you mean by that that in all cases you were never asked to bid by General Motors?

A. That is drawing a pretty fine line. We were sellers. We were interested in retaining their business, and we would maintain contact with them. Whether we initiated a quotation or they actually asked us would be pretty hard to say.

Q. Has that been true over the years?

A. Yes.

Q. I mean going back to, say, when you first came out with your permanent antifreeze in 1940?

A. Yes, I think so.

Mr. Harsha: Thank you. I think that will be all.

Redirect Examination.

By Mr. Cox:

Q. Mr. Schumacher, there are two or three questions which I would like to ask you. I think one of them I simply forgot to ask on direct examination, and it may be that Mr. Harsha will then want to ask you something about the same subject matter.

That has to do with the occurrence in 1953 that you testified to on your direct examination, that is to say, the loss of the General Motors' business for resale. Were you told by General Motors that they were going to get their resale requirements from another supplier?

A. Yes, sir.

Q. Did they tell you how they intended to market that anti-freeze? Would it be under their brand name or someone else's?

A. They made it clear that they had a supplier of their own brand.

Q. Who would supply them with material which they would sell under their private brand?

A. Under their own brand, yes, sir.

[fol. 7152] Q. Mr. Schumacher, Mr. Harsha asked you on cross examination some questions about the supply situation in 1953, and particularly about any increase of production facilities that may have occurred just before or during that year.

Can you tell us what factors, in your opinion, as a student of the market, contributed to the easing of the supply situation in 1953?

A. Well, if I may restate in a way my answer to Mr. Harsha, there may have been some improvement in supply, but we didn't regard it as significant.

The important factor, as we interpreted the market, is that the 1952-53 winter has been an unusually mild one, pretty well over the country, and sales of anti-freeze of all brands, as nearly as we can determine, have deteriorated very much.

That has accumulated large inventories in the hands of the manufacturers or the prime producers. It has accumulated inventories in the hands of wholesalers, and to a degree inventories at the retail level. All of that has a very pronounced effect on what we call the supply situation.

Q. You also testified in response to questions by Mr. Harsha on cross examination about certain companies who now or post war have produced ethylene glycol. Do you remember some of the questions and answers about those companies?

A. Yes, sir.

Q. Did any of those companies, to your knowledge, produce ethylene glycol before the war?

A. Not to the best of my recollection except for carbide.

Q. They are companies that went into the production after the war, or during the war?

A. Pretty generally post war.

[fol. 7153] Mr. Cox: May I have the Court's indulgence?
That concludes the redirect.

Mr. Harsha: Just a question, if I may.

Recross Examination.

By Mr. Harsha:

Q. Regarding this loss of the 1953 contract with General Motors for the resale, is that the portion of the business you were describing?

A. Yes, sir.

Q. It has nothing to do with the production line requirements, is that right?

A. No.

Q. Do you still have that at du Pont?

A. We think we have the Chevrolet business settled. We feel reasonably sure of Cadillac. The other business, to the best of my knowledge, has not yet been placed.

Q. Turning to this resale business, does that apply to all the GM units, this resale?

A. No. We believe we are retaining the Oldsmobile unit as resellers of Zerone and Zerex.

Q. How about the other car units?

A. We had Pontiac lined up, and they have deserted us to go along with Buick and Chevrolet, and Buick and Chevrolet have regained a brand of their own.

Q. What is the name of that new supplier, do you know?

A. Well, I was informed that it was Genessee Products, or some such name.

Q. Have you ever heard of them before as a seller?

A. I have heard the name, yes.

Q. Is it a major supplier?

A. Well, we regard them, sir, as packagers and, I suppose, suppliers.

[fol. 7154] Q. You mean they don't produce their own ethylene glycol antifreeze?

A. Not so far as I know.

Q. Do you know where they buy it? Where they obtain the material?

A. No, I don't know.

Q. Do you sell them any antifreeze material?

A. No, we do not.

Q. They are not considered as a producer of the material, is that right? They are just a packager?

A. That is correct.

Mr. Harsha: I think that is all.

Mr. Cox: That is all, if it please the Court.

The Court: You may be excused.

(Witness excused.)

STIPULATION RE TESTIMONY OF PAUL P. HUFFARD

Mr. Cox: May it please the Court, there was one other witness we had planned to call to testify on our behalf with respect to the subject of antifreeze.

Mr. Harsha has very kindly agreed that instead of putting this witness, who is employed by another company, to the inconvenience of coming to Chicago, that we may stipulate as to the tenor of his testimony..

I should now like to read this stipulation that has been agreed to by counsel for the Government:

"It is stipulated by the parties hereto that if Mr. Paul P. Huffard were called as a witness to testify in this cause, he would testify as follows:

"My business address is 30 East 42nd Street, New York City, New York.

[fol. 7155] "At the present time I am Vice President, Director and a member of the Executive Committee of Union Carbide and Carbon Corporation.

"Before December 31, 1949, National Carbon Company and Carbide and Carbon Chemicals Corporation were wholly-owned subsidiaries of Union Carbide. On December 31, 1949, the subsidiaries were merged into Union Carbide.

"I joined National Carbon Company in 1919. I was president of National Carbon from 1929 until 1944. From 1944 until 1949 I was Chairman of the Board of National Carbon.

"In 1927 National Carbon began to offer a new product, ethylene glycol antifreeze, under its trade name

of 'Prestone.' Since that time National Carbon has continued to market the Prestone antifreeze.

"I had direct executive supervision of the development and promotion of markets for 'Prestone' from 1927, when the product was first introduced, until 1944. Since 1944 I have continued to keep myself generally informed as to the antifreeze business of Union Carbide and its divisions.

"In the early years, technical difficulties were encountered with 'Prestone' which National Carbon was gradually able to overcome. Among the main early difficulties which were successfully overcome were leakage, foaming and rust-loosening.

"By 1935 National Carbon succeeded in establishing a public demand for 'Prestone' antifreeze which was distributed under that trade name through local jobbers and dealers.

"In 1936 I participated in negotiations relative to supplying General Motors with the 'Prestone' antifreeze.

[fol. 7156] "The circumstances which led to such negotiations were as follows: Mr. Donaldson Brown, who was an officer in General Motors Corporation, telephoned me in New York. Mr. Brown had been a college classmate of my brother and I had known Mr. Brown for some time in a social and friendly way. During the course of the telephone conversation Mr. Brown said to me that General Motors wanted to buy antifreeze from Union Carbide; that he suggested that I go to Detroit and discuss the matter. I told Mr. Brown that I would do so.

"I went to Detroit and had discussions with several General Motors men. I came back to New York and returned to Detroit a second time for further discussions. Then I came back to New York—and later returned to Detroit for still further discussions. I cannot now remember the names of the General Motors representatives with whom I talked.

"The substance of what went on was as follows: Throughout the discussions the General Motors men urged me to supply them with antifreeze. They stated they wanted the antifreeze for resale under a private

brand name of General Motors rather than under the trade name of 'Prestone.' I said I wanted to continue to market antifreeze under the National Carbon trade name of 'Prestone.' Since the General Motors people were only interested in selling the antifreeze under a General Motors trade name, the negotiations came to an end.

"My basic reasons for taking this position were as follows: I wanted to build up a market for the antifreeze exclusively under the National Carbon trade name of 'Prestone' because that was considered to be, [fol. 7157] in the long run, the best merchandising policy for the Union Carbide organization. National Carbon was selling all the ethylene glycol antifreeze which the Union Carbide organization could produce, and hence there was no occasion to make any exceptions from Union Carbide's merchandising policy in order to move any excess supply of the ethylene glycol anti-freeze.

"Prior to the time I had such negotiations with General Motors, or prior to the end of the year 1936, we had never sold any of the ethylene glycol antifreeze for distribution under any private brand name other than 'Prestone.' Commencing in 1940 the Union Carbide organization did sell ethylene glycol for distribution under private brand names.

"During 1936 Carbide and Carbon Chemicals Corporation was producing methanol and has continued to produce it. With the exception of the last year or two, our production of methanol has always been insufficient to cover the amounts used and sold by the Union Carbide organization. From time to time we have purchased methanol from du Pont in order to meet our needs.

"Since the war commenced and right up to the fall of 1952 there has been an acute shortage of ethylene glycol with the demand always exceeding the supply."

Now, may it please the Court, we have a few documents which we would like to offer at this time, which will complete the presentation of our case.

Mr. Gribbon is going to present a number of those documents at this time.

[fol. 7158] OFFERS IN EVIDENCE (DU PONT)

Mr. Gribbon: May it please the Court, during the course of the Government's rebuttal case, they introduced a series of excerpts from reports by the du Pont Fabrics and Finishes Department to the du Pont Executive Committee relating to the sales of those two products, fabrics and finishes, to General Motors.

Those are Government's Trial Exhibits Nos. 1367 through 1386.

I would like to offer at this time a series of supplemental excerpts from those same reports. I do not propose to go into any additional reports, but merely to add to the record such additional excerpts from those reports selected by the Government which seem to bear upon the rebuttal purpose of the Government.

In doing this, I should like to say we do not waive our objection to the introduction of many of these exhibits on the ground that they are not rebuttal material, but in the event that Government's exhibits are retained in the record, we believe it is important that these additional excerpts be considered in connection with them.

The exhibits which I propose to deal with, your Honor follow in the book that was given to you by Mr. Cox this morning. They begin with Exhibit DP 558. I think it is about the third or fourth exhibit in the book, following the tables on antifreeze.

The first one is an excerpt from the Paint, Lacquer & Chemicals monthly report, dated December 23, 1926.

The Government offered as Exhibit No. 1368 an excerpt from the same report to the Executive Committee, of which we have prepared a supplemental excerpt, identified as Exhibit DP 558, which I now should like to offer in evidence.

[fol. 7159] (Said document so offered and received in evidence was marked du Pont Exhibit No. 558.)

Mr. Gribbon: The portion of the excerpt which the Government used dealt only with the subject of rubberized fabrics. The supplemental excerpt which we have introduced deals with finishes.

The stated rebuttal purpose of the Government's excerpt

is to show, as it said, the importance of General Motors as a customer of du Pont, and to show competition in businesses generally.

Your Honor will note in Exhibit No. DP-558 on the second page, that during the period covered by the report, of the entire amount of colored "Duco" sold by the du Pont Company, but 19 per cent was sold to all of the General Motors units, while 33 per cent of that amount went to other motor manufacturers, and the balance was split among other users of "Duco."

Turning in the same exhibit to the bottom of page 3, the paragraph there your Honor will note reads:

"The General Motors Corporation are unwilling to make a requirements contract for 1927. We have reduced the price of thinners from \$1.75 per gallon to \$1.50 per gallon in one instance, and from \$1.40 to \$1.20 in another instance; these prices being subject to a quantity trade discount."

The last paragraph:

"In addition to the above, some divisions of the General Motors Corporation at least will undoubtedly make their own thinners."

[fol. 7160] The thinners being the product which the du Pont Company had been selling to General Motors.

The next exhibit which I should like to offer has been identified as No. DP-563.

(Said document so offered and received in evidence, was marked du Pont Exhibit No. 563.)

Mr. Gribbon: Now, when it came to collecting excerpts from the 1950 report, the Government reversed its procedure and at this time introduced as Exhibit No. 1386, material relating to finishes, and left out that relating to fabrics.

We should like to include in the record this excerpt which is a du Pont Exhibit, No. DP-563, relating to the fabrics sales during the period, and it reads:

"During 1950 we secured new business at several important automobile manufacturers, namely Ford,

Willys and Studebaker. An increased percentage of Fisher Body's 'Teal' business resulted from an improved product."

It goes on to estimate the major competitors in the automotive market, showing du Pont, Ford following closely behind, Textileather and next United States Rubber Company, another defendant in this case.

I next offer Exhibit No. DP-564, which is an excerpt from the 1935 Annual Competitive Report of the Fabrics & Finishes Department, which is the full paragraph quoted in part in Government's Trial Exhibit No. 1375. The portion omitted by the Government is the very last sentence which begins:

"During 1935 the position of du Pont and leading competitors was"—

[fol. 7161] and it shows that the Chase Company had a somewhat higher percentage of the business than du Pont, and that approximately 50 per cent of the market was going to all others.

(Said document so offered and received in evidence was marked du Pont Exhibit No. DP-564.)

Mr. Gribbon: I should like to offer next the following three exhibits in your Honor's book which have been identified as Exhibits DP-559, 560 and 561.

(Said documents so offered and received in evidence were marked du Pont Exhibits Nos. 559, 560 and 561.)

Mr. Gribbon: First, DP-559 is an additional excerpt from the 1937 Annual Competitive Report of the Fabrics & Finishes Department, a portion of which has already been marked by the Government as Government's Exhibit No. 1377.

Exhibit DP 560 is a portion of the report already marked in part, as Government Exhibit 1380, and DP 561 is a portion marked as Government Exhibit 1381.

In these Government trial-exhibits to which I have just referred, that is Exhibit No. 1377, 1380 and 1381, the Government has selected paragraphs from a portion of the annual report dealing with the du Pont Company sale of

automotive finishes. In each case they have omitted a single paragraph, usually the final paragraph of the report, and in order that the complete report relating to automotive finishes will be in the record, we offer these exhibits, 559, 560 and 561.

[fol. 7162] We propose to read only 559 which states:

"Pittsburgh Plate Glass Co. secured the next largest share of automotive finishes business, estimated at 18.58% of the industry's total purchases, through supplying practically all of Chrysler's requirements."

I next offer Exhibit DP 562. This is an excerpt from 1947 annual competitive report of the Fabrics and Finishes Department which is the paragraph that immediately follows the third paragraph of Government's Trial Exhibit No. 1383.

It consists of two paragraphs from the report dealing with fabrics, one of which states that the du Pont Company has improved its position in the fabrics field, in the course of the previous year, and the third paragraph which states the reasons for that improvement has not been included in the Government exhibit and is set forth here in Exhibit DP 562, and reads as follows:

"Increased sales for bookbinding, automotive trim and upholstery and surgical tape were chiefly responsible for du Pont's improvement in 1947. In the first two industries we either regained business from competition, which was temporarily lost during the period of fabric shortage, or obtained new business outright on the basis of superior quality and service."

(Said document so offered and received in evidence was marked du Pont Exhibit No. 562.)

Mr. Gribbon: The final exhibit which I propose to offer is the one that follows in your Honor's book and has been [fol. 7163] identified as Exhibit DP 565.

This consists of excerpts from a publication known as "Du Pont Products Index." This particular issue of Products Index was published, as shown on page 2 of Exhibit DP 565, in 1946, and I might state that it was not supplanted by an additional publication until 1949.

The purpose of the du Pont Products Index is, as stated on page 3 of DP 565, in the introduction, where it sets forth that the index contains information on chemicals and allied products manufactured and sold by the E. I. du Pont de Nemours & Company.

Mr. Gribbon: Exhibit DP 565 contains excerpts from the Products Index relating to four categories of products, Adhesives, which begins on page 4 of the numbers at the top; the second category of the products dealt with in this exhibit is anodes, which begins at page 17 on the top of the exhibit; the third category is Fabrics which begins at page 23, the numbers being at the top of the exhibit; and the final category is Solvents sold by the Finishes Division.

Now, the excerpts which we have included in Exhibit DP 565 all bear generally upon the statistical tabulations that have been identified as Government's Trial Exhibits 1343-A, 1388, and 1391 through 1394 which were introduced on Friday.

More particularly, the first section of Exhibit DP 565 relating to Adhesives shows that at this time in 1946 and through 1947 the du Pont Company was offering a broad line of adhesives and cements, during the same period in which Government's Exhibit 1343-A shows that General Motors was purchasing very substantial quantities of adhesives from competitors of du Pont, and the figures on [fol. 7164] General Motors purchases from competitors of du Pont were \$2,000,000 in 1946, and \$3,000,000 in 1947.

Now, the first three pages of the section relating to adhesives simply take the index from the Products Index, and show the names of the du Pont products that fall into the categories of adhesives and cements, and the following pages of the section dealing with adhesives are marked to indicate the rather brief description of each of the products in the adhesives and cement categories that were offered by the du Pont Company.

Similarly, the second section of DP Exhibit 565, that relating to anodes that begins at page 17 of the exhibit, bears upon Government's Exhibit No. 1343-A which shows that during this period of 1946 and 1947 General Motors was purchasing approximately a million dollars a year of anodes from competitors of du Pont.

The third section of Exhibit DP 565 relating to fabrics shows the variety of purposes other than upholstery and trim, for which du Pont's fabrics products are sold and used. More particularly, in light of the Government's contention to the contrary, this section on fabrics at page 26, at the top of the page clearly shows that du Pont for 1946 was making and offering "Teal" for use in convertible automobiles as curtain and top fabric. That is on page 26, the fourth item on the left-hand side.

The final section of Exhibit 565 shows on the first three pages which are taken directly from the index, the extensive line of solvents that are offered by the du Pont Finishes Division.

Your Honor will see that beginning at page 28 of the exhibit we have included everything under solvents, and [fol. 7165] underscored those items that were offered by the Finishes Division.

The Court may recall that on Friday, when the Government counsel introduced Exhibits 1393 and 1394, which purported to show General Motors' purchases of finishing materials from du Pont and competitors of du Pont, the Government excluded from General Motors' purchases from competitors of du Pont its purchases of solvents for use in finishes, which came to a half million dollars in 1946, and a million dollars in 1947.

The basis for that exclusion, according to Government counsel was that du Pont did not manufacture or offer solvents for use in finishes.

The first three pages of this exhibit, as I have said, lists the finish solvents offered by du Pont and the remaining pages give a brief description of a number of different solvents of various chemical composition offered by du Pont for use with finishes.

Mr. Harsha: May it please the Court, are you through with your description of the exhibit?

Mr. Gribbon: Yes.

Mr. Harsha: The Government would like to interpose an objection to this document being received in evidence on grounds very briefly, your Honor, that the import of this exhibit is to give the impression that with respect to all of these items that have been marked in here, the du Pont

Company was attempting to sell and solicit the business of General Motors with respect to these items.

The record does not support that, and furthermore there is no evidence that there was actual production in the [fol. 7166] years in question, namely, 1946 and 1947, of all of these products which have here been listed.

In fact, the book itself tends to contradict some of their own witnesses on this point.

Reference has been made to anodes, and the great list of anodes made by the du Pont Company according to this catalog, and yet we turn to the record in this case and we find at page 9,174 that their witness K'Burg stated that, when he was describing the products which they were attempting to sell, and he said,

"We sell the chemicals which make up the electrolyte or the solution for conducting the metal from the anode to the part to be plated.

"In addition to that, that is primarily sodium cyanide, because our interest is in the cyanide processes, we sell brighteners, addition agents that enable one bath to operate differently than another or produce different desired effects.

"We at one time sold copper anodes, but now we do not. We do sell cadmium anodes, however.

"Q. Did you sell zinc anodes?"

"A. Zinc and tin anodes at one time, but we no longer do. Our interest is in the chemicals."

Now, it is that type of testimony which I think has a very relevant bearing on the inferences to be derived from use of a Products Index, which is now being introduced for the first time at the very end of their case, and from this we are supposed to assume that all of these products have [fol. 7167] been offered for sale to General Motors Corporation, and there is nothing in the record to support that, and in many cases it is contradicted by their own witnesses. For that reason I move it not be received.

Mr. Gribbon: I suggest that counsel offered no reason against the introduction of it in evidence. We offer it to show these products were manufactured and offered by the du Pont Company in 1946 and 1947. We have shown by

other proof in this case the extent to which we made sales efforts and the extent, to General Motors, and other customers.

The Court: The objection is overruled. It will be received.

(Said document so offered and received in evidence was marked Defendants' Exhibit No. DP 565.)

Mr. Cox: May it please the Court, I will now offer the last six documents in your Honor's book. These documents are charts, and your Honor will recall that last Friday we had some discussion about charts, and I am rather inclined to think that almost everything that can be said about these charts and the Government charts was probably said at that time, so I shall try to confine my remarks within a compass that will reduce the area of controversy as much as possible, particularly in view of the hour of the day.

There are two things I should like to say about these charts before I introduce them, and one is that, of course, as Mr. Gribbon said with respect to his documents, we do not by introducing these charts intend to waive the objection urged by Mr. Hurd on behalf of all of us, that the Government charts are not proper rebuttal.

I think I should also say that in offering the charts we do not waive or abandon another position which Mr. Hurd [fol. 7168] has urged on behalf of all of us. I think he stated that position with particular clarity and force on the occasion of the argument on the subpoena, and that position is that in our view the controlling question in this case is not what percentage of General Motors' requirements du Pont supplied, but why the sales or rather why the purchases from du Pont were made by General Motors.

The ultimate question is whether those purchases were made for normal, usual business reasons, or whether they were made, as the Government contends, pursuant to some enveloping over-all conspiracy that has existed for thirty-five years.

Now, it is our position that the purchases were made for lawful business reasons, and we think for that reason, no matter what the percentage of General Motors' requirements may be that is covered by the purchases, that fact

cannot affect the ultimate legal conclusion. I think I might point out to your Honor that in our case in chief, we ourselves came forward with evidence of some situations in which du Pont supplied all or nearly all of the requirements of the General Motors or certain of its divisions. We did that because we believed that that circumstance along with others, supported our contention that the relations between the companies were proper, normal business relations.

Now, saving those two points, I should now like to offer these charts in evidence. They are offered merely because we believe that since the Government has offered similar charts which have been received subject to our objection, the Court should have before it charts that we believe are correctly compiled and which do not contain the errors and [fol. 7169] misapprehensions which we believe vitiate the Government's charts.

In other words, they are offered primarily for the sake of accuracy and completeness.

The first of these is the chart which has been marked defendant du Pont Exhibit No. 569. That is a chart which compares for the two years du Pont sales of imitation leather and coated fabrics to General Motors, and General Motors' purchases of those commodities from du Pont's competitors.

For the reasons that were stated last Friday by Mr. Hurd and Mr. Neitzert, which I shall not repeat, we believe if a comparison is to be made, the comparison should be a comparison of all of du Pont's sales of both imitation leather and coated fabrics, with all of General Motors' purchases of those commodities, and not merely a comparison of General Motors' purchases of imitation leather with all of du Pont's sales.

When your Honor compares our chart with the Government's chart you will see that it does make a rather substantial change in percentages.

Mr. Harsha: May I speak on these charts, please?

Mr. Cox: Yes.

Mr. Harsha: With respect to du Pont Exhibit No. 568 which is their chart on finishes, your Honor, I should like to interpose an objection on behalf of the Government.

For one thing, the heading of the chart, we do not believe, is in accord with the facts in this record, namely that

these are purchases by General Motors from du Pont and its competitors.

[fol. 7170] Now, to be competitive, we submit, du Pont and the other companies must be producing comparable items. We went into this at some length, I believe, as to the manner in which we had put together the figures which appeared in the Government's pie charts which are somewhat analogous to these, and one of the items not included was solvents for finishes which they have included in their chart here as indicated.

Now, in view of the testimony in the case that the du Pont Company was not offering solvents—we have had two or three witnesses on that, and some of their own witnesses have indicated that they were not offering solvents for sale to General Motors—I believe we were justified in excluding it, and obviously it was a question of what you put in to consider them as comparable items.

Now, if du Pont was not offering for sale a particular item at that time, then obviously if you load in a lot of purchases by General Motors from other sources, why you get quite a distorted picture, and we think that is not quite so apparent in du Pont Exhibit No. 568 because solvents is not a tremendous item, but it does affect the proportions, but it becomes even more apparent, I believe, in the fabrics' picture in du Pont Exhibit No. 569, because while I don't want to elaborate at length, we have had witnesses on the stand describing the types of fabrics.

We had the witness Nalle on the stand the other day, for example and he stated that some of the companies which were selling to General Motors during this period—that is the companies other than du Pont—were selling things like gaskets and welts and gimps and so forth.

[fol. 7171] He admitted right on the stand that they were not then—for example, welts were not being produced by du Pont—so you have no idea as to what fabrics are truly competitive, and for that reason we confine our comparisons to upholstery and trim where we could ascertain that these were fabrics which were actually in competition between du Pont and other companies, but when you put in other fabrics some of which the du Pont Company is not manufacturing, then certainly it is mis-

leading to call these fabrics' purchases from du Pont and its competitors. They are not competitive.

I would suggest in respect to these, your Honor, that since you reserved your ruling as to their admissibility, that is the Government exhibits, as to the admissibility of those exhibits until such time as the final briefs are submitted, that since these charts go to the same type of thing, only seeing through the defense's eyes, that ruling be withheld at this time.

The Court: Well, the Court will make the same ruling as to these exhibits. The Court will receive them subject to objection.

(Said documents so offered and received in evidence were marked du Pont Exhibits Nos. 568 and 569.)

Mr. Cox: I assumed that was the way these exhibits would be dealt with, your Honor. I think I have concluded my description of the fabrics charts, and I might say as to that and the next three charts that they all rest ultimately [fol. 7172] on the grand jury figures which are contained in Government's Trial Exhibits Nos. 1343-A and 1344.

I shall next offer then du Pont Exhibit No. 568, which is the exhibit headed General Motors Corporation purchases of finishes from du Pont and its competitors, and as Mr. Harsha has pointed out, this exhibit is compiled on different bases from the bases on which the Government finishes exhibit was compiled, and the difference is chiefly in the inclusion of the solvents which we believe the record shows were made and offered at this time—that is, 1946 and 1947—by du Pont.

The Court: The Court's ruling will be the same on all of the chart exhibits.

Mr. Cox: I next offer the chart marked du Pont Exhibit No. 570 which consists of two pie charts, one for 1946 and one for 1947, which compares General Motors Corporation purchases of adhesives from du Pont with its purchases of adhesives from du Pont's competitors.

Again these two pie charts rest on the grand jury figures that are found in Government Trial Exhibits Nos. 1343-A and 1344.

I take it that the objection runs to all of the documents and the same ruling will be entered thereon.

Mr. Harsha: Yes, I think we would interpose the same line of objection to the next four, Exhibits 570 to 573. I don't want to load the record with our objections.

The Court: Well, the same ruling stands as to all.

(Said document so offered and received in evidence was marked du Pont Exhibit No. 570.)

[fol. 7173] Mr. Cox: We next offer Exhibit marked du Pont Exhibit No. 571 for identification consisting of two pie charts, one for 1946 and one for 1947, comparing the General Motors Corporation purchases of anodes from du Pont with its purchases of anodes from du Pont competitors, and again the chart rests on the grand jury figure.

(Said document so offered and received in evidence was marked du Pont Exhibit No. 571.)

Mr. Cox: I next offer the document that has been marked du Pont Exhibit No. 572 for identification which consists of two pie charts, one for 1946 and one for 1947 and bearing "General Motors Corporation purchases of chemicals (solvents) from du Pont and its competitors," and this again rests on the grand jury figures.

I might say by way of explanation here that the reason this chart is handled as it is is because in the General Motors return to the grand jury subpoena, there were two separate treatments of solvents. There was one category of solvents dealt with under the heading "Finishes," and it is those solvents which we have included in our finishes chart, and there was another category of solvents dealt with under the general heading "Chemicals," and it is that latter heading of "Chemicals" which is covered by this exhibit which I now offer.

(Said document so offered and received in evidence was marked du Pont Exhibit No. 572.)

Mr. Cox: And finally I offer the table which has been marked du Pont Exhibit No. 573 for identification.

This table rests in turn on the prior pie chart Exhibits, [fol. 7174] and also on the Government trial exhibits which contain the grand jury figures.

(Said document so offered and received in evidence was marked du Pont Exhibit No. 573.)

Mr. Cox: This table, your Honor, produces a total by adding to finishes and fabrics and antifreeze which were the three products that the Government totaled in its total table, the table that Mr. Hurd described as a "monster"—it adds to those products the chemical products "Anodes and Solvents", and the adhesives, and in addition it contains recomputed figures for the finishes and fabrics, the same figures that are reflected in the pie chart.

Here your Honor will notice that on the basis of this computation the total percentage of the requirements of General Motors, that General Motors purchased from du Pont in the years in question, is substantially less than the percentage shown in the Government's table which was confined to finishes, anti-freeze and fabrics and in which table the figures we submit as to the finishes and fabrics were computed on an erroneous basis.

Mr. Harsha: Before you proceed any further, before we pass it too far, with respect to du Pont Exhibit No. 572, which is your solvents chart, I don't want to belabor my objection at this point, but am I to understand from this that among the purchasers contained here in this chart, under the heading, "All others" meaning other than the du Pont Company are included purchases by General Motors from some companies which are distributors of du Pont's solvents?

Mr. Cox: I can answer that question only in general terms. I think there is in evidence a list of the du Pont [fol. 7175] competitors, and I would be glad to answer the question as directed to the particular companies listed here.

Mr. Harsha: Well, I have particular reference to the Detrex Company, which I believe is listed as the first or second largest supplier.

Mr. Cox: My information is that the Detrex Company has been a distributor of du Pont's products, but the question whether General Motors, in response to the Grand Jury subpoena, reported purchases from Detrex of products which Detrex in turn obtained from du Pont is a question, Mr. Harsha, that I can't answer.

It would have to be addressed to Mr. Hurd. He is the

authority on that branch of the case. If there is any other name that you should like to inquire about, I should do my best to answer it.

With the introduction of du Pont Exhibit No. 573, that I think concludes the presentation of our documents and evidence.

Mr. Harsha: Just to get this clear in the record, if I may, may I ask Mr. Hurd whether included in the purchases from others, as shown in du Pont Exhibit No. 572, are included purchases by General Motors of solvents which are manufactured by du Pont and distributed by other companies, such as Detrex?

Mr. Hurd: If the Court please, I can't answer the question specifically, but I think perhaps I can cover it from the general standpoint.

I am not sure whether this is contained in an interrogatory or not. It seems to me it was. I know that in preparation for trial, the Government inquired of General Motors as to whether or not any purchases reported to the grand [fols. 7176-7177] jury as from competitors of du Pont could have been purchases of products made by du Pont but sold to us through some jobber or distributor, or someone else.

After an investigation, we reported back that the same thing had occurred to us subsequent to our rendering figures to the grand jury; that it was possible in obtaining the data on the competitive purchases that something might have been included which was a du Pont product, although we had not bought it from du Pont, and we had undertaken to check that very point.

It is almost impossible to get an absolutely precise check on it, but we found that if there was such an error as that in our figures that it amounted to less than one per cent. I think at the maximum it was around three-tenths of one per cent; that our figures might be wrong as much as three-tenths of one per cent.

I cannot relate this to any particular product, but I do have that information as to the over-all exhibit.

Mr. Harsha: Would your answer hold the same, Mr. Hurd, with respect to the Blakely Company as to solvents?

Mr. Hurd: That would be true as to any particular product and any particular company.

All I know is that the over-all figures cannot be inaccurate more than three-tenths of one per cent. I am quite sure that appears of record in this case.

I am sure we answered an interrogatory to that effect, with an affidavit to that effect.

[fols. 7178-7363] Mr. Ragland: I wish to call the Court's attention to a proposed post-trial stipulation, which the parties propose to enter into, to be completed as soon as corrections to the record and other similar matters have been completed.

The purpose of the stipulation is to provide for certain post-trial details for the convenience of the Court and all parties, so that they may conveniently handle the record and prepare the briefs and the findings.

Counsel for the Government and for the defendants have approved in substance the proposed stipulation. It is understood that amendments to the stipulation, and especially to the appendices at the back of the stipulation, will be made as the correcting process progresses.

I wish to call the Court's attention especially to paragraph one, at the top of page 2 of the stipulation. It is provided there that the pre-trial order that the Court entered on January 5, 1953, shall be superseded in respect of certain provisions which have served their purpose now and no longer need govern the future conduct of the case.

I should like to ask if this arrangement is satisfactory to the Court because it is all proposed.

The Court: Yes, I have no objection. That is a practical way to handle it.

[fol. 7364] EXCERPTS FROM THE ARGUMENT OF
MR. HOUCHINS

At this point I would like to make it clear what the position of the Government is as to this agreement and understanding as to inter-company sales between du Pont and General Motors.

It has never been the Government's position that General Motors was required to buy willy-nilly all of the products

which are manufactured by du Pont. I think that is best illustrated by simply looking again to Paragraph 56 of the complaint which is the paragraph respecting this inter-company sales agreement, and by reading the language in the middle of Paragraph 56 which reads:

"It was agreed that General Motors would purchase from du Pont all or substantially all of its requirements"—

and I wish to emphasize the word "requirements"—

"manufactured by du Pont, and would refrain, in whole or in large part, from purchasing such products from competitors of du Pont."

Now, I think it is clear from a reading of that allegation

in the complaint that it is not, for example, the Government's position that if General Motors did not require and could not use, say any nylon hose, that it nevertheless had to buy nylon hose from du Pont; or, for example, if General Motors did not require and could not use sulphuric acid, that it had to buy sulphuric acid from du Pont; and similarly it is not the Government's position and has never been our position that if General Motors did not require and could not use brake fluid of say 300 degree boiling point because it needed brake fluid of say 350 degree boiling [fol. 7365-7371] point, that it nevertheless had to buy that 300 degree boiling point brake fluid from du Pont; and finally, similarly it has never been our position, for example, if General Motors did not require and could not use a non-transparent steering wheel plastic because it needed transparent steering wheel plastic, that it nevertheless had to buy the non-transparent from du Pont.

General Motors, after all, was in business. We recognize that. It had to make and sell automobiles in a competitive market, and certainly the Government has never contended that General Motors had to buy from du Pont products which it could not use.

Instead it is the Government's position that General Motors, by the agreements and understanding alleged in the complaint was to buy its requirements—and "requirements" by the very nature of the word means a product.

that is needed and is usable—if a purchase has to be stored away in a warehouse, for example, because it cannot be used in a competitive market, then I submit that is not a requirement of the purchaser.

To return, however, to the main track and the evidence concerning these miscellaneous products, we believe that undoubtedly this evidence was a diversionary tactic and the purpose was to divert the Court's attention from the proof which has been offered concerning fabrics and finishes.

[fol. 7372] Now, your Honor, we turn to the subject of brake fluid, which in some respects is similar to the subject of safety glass because, here, also, we have a situation in which General Motors was supplying itself with brake fluid, and that is the reason they didn't get brake fluid from du Pont.

General Motors adopted hydraulic brakes in 1934. Most of the major producers were adopting hydraulic brakes in about that same time. The hydraulic brakes, of course, require brake fluid, and this put General Motors in the need of a brake fluid supply.

However, it was the practice on the part of all the major producers, Chrysler, Ford, all the majors, to mix their own fluid. This, I think, came about because the brake fluid mixing operation is the simplest operation imaginable. It isn't a chemical operation. It is simply putting several oils in a vat, stirring them up and mixing them. One of these oils is castor oil, and there are various others.

But the operation is simple, no hazards involved, no dangers involved in the operation.

[fol. 7373] General Motors, then, following suit, following the custom of other major producers in the business, started mixing their own brake fluids. With the single exception of a short period of time, a little less than a year, after General Motors adopted hydraulic brakes, at which time they were securing this fluid from an outside source, with the single exception of that short period of time, General Motors has always right up to the present mixed its own brake fluids.

Now, the defendants have come up with some evidence which they hope will show that du Pont was making brake

fluid, tried to sell it to General Motors, and General Motors didn't buy it. That, they say, refutes the Government's charges.

Of course, I have already made the point that General Motors was making its own brake fluid. However, in addition to that, the record clearly shows that the various brake fluids which du Pont offered to General Motors were simply not up to General Motors' needs.

Du Pont offered fluids at three different times. They offered fluid in 1934, 1935, and in 1939. These fluids all differed somewhat, and apparently they represented efforts on the part of du Pont to improve their fluid to the point where General Motors could use them, but they were always unsuccessful.

However, the fact is that General Motors tried and tested every single du Pont brake fluid without exception. But in the case of each of them, they declined to abandon their own economical and satisfactory method of supplying themselves, and declined to use the du Pont fluid.

[fol. 7374] One of the defendants' witnesses on the subject was Mr. Weber. Mr. Weber was asked why it was that General Motors apparently had declined to use the du Pont fluid, and he said this:

"One person"—

and he means a General Motors' person—

"might complain that the rubber swelling was too great; another unit might complain that the fluid corroded the metal to too great an extent."

As a matter of fact, as to the 1934 brake fluid, the first one the du Pont Company offered to General Motors, that fluid was so unsatisfactory that du Pont never sold a single drop of that fluid to any automobile company, with the single exception of Reo, who finally was induced to buy fifty gallons. That, I think, speaks more adequately than I can as to the inferiority of the du Pont fluid.

It moreover appears from the record that the du Pont fluids had low boiling points and they had high freezing points, another factor which made them unusable by General Motors. As a matter of fact, Walker admitted on cross examination that as to the 1939 brake fluid, it did not even

meet General Motors' specifications as to freezing points.

Clearly this is an adequate reason for General Motors not using the du Pont fluid. They simply couldn't use it and stay in the competitive market they were in.

The decisive fact, however, which I wish to leave as to this subject before I go to another one, is that this evidence is contrary to what the defendants would have the Court [fol. 7375] conclude because the evidence shows that General Motors never purchased a drop of brake fluid from any outside supplier, du Pont or any other outside supplier, after 1935.

In this situation, where du Pont was competing, as it were, not with an outside supplier but with General Motors itself, the defendants would have the Court believe that this shows an unsuccessful competitive struggle.

We submit that nothing of that sort could be concluded from this evidence.

The Government, as I have pointed out, has never maintained as part of its position that General Motors was required to buy from du Pont materials which it could not use or materials which it did not need to purchase from an outside source at all because it was producing its own fluid.

Your Honor, at this point, if I may digress just a moment, the defendants have maintained that the presence of General Motors in the brake fluid business and in the safety glass business is at odds with the Government's position elsewhere in the case concerning the division of fields.

I am referring to tetraethyl lead, Kinetic chemicals, and artificial rubber portions of the case.

We submit that by an examination of the complaint respecting that allegation concerning the division of fields, that it is immediately clear that this evidence is wholly consistent with the evidence concerning tetraethyl lead, Kinetic chemicals, and with the allegations of the Government with respect to that.

[fols. 7376-7563] The relevant paragraph in the complaint to the division of fields is Paragraph 64. The significant portion of that paragraph reads:

"In connection with this expansion, du Pont Company entered into an agreement with General Motors

to the effect that the latter would refrain from the manufacture of chemicals, including paints and varnishes and similar products, leaving this field, as between the two companies, exclusively to du Pont Company."

Your Honor, in the case of these two subjects I have talked about, clearly you don't have a chemical operation. One is pasting together two pieces of glass, and the other is mixing up several oils. Certainly this is not a chemical operation, and it has no application to the paragraph which I have just read from the complaint.

Brake fluid and safety glass are certainly not chemicals. They are not paints. They are not varnishes. They are not similar products.

We submit that the evidence concerning brake fluid and safety glass is wholly consistent with the Government's position elsewhere in the case as relating to the division of fields.

[fol. 7564] EXCERPTS FROM THE ARGUMENTS OF
● MR. BRASS

Du Pont argues that General Motors retains complete freedom to buy from any competitor of du Pont Company whenever it decides that the price and the quality or the service is more attractive.

Now, a similar contention was made in the International Salt case, and there the Court rejected that contention. Despite the fact that the contract there contained such a provision, it was said in that case on page 397 by the Supreme Court, and I quote:

"We do not think this concession relieves the contract of being a restraint of trade, albeit a less harsh one than would result in the absence of such a provision. The 'Saltomat' provision obviously has no effect of legal significance since it gives the lessee nothing more than a right to buy appellant's salt tablets at appellant's going price. All purchases must in any event be of appellant's product."

And that, your Honor, disclosed that assuming that that is the situation here, that General Motors would perhaps have some freedom in the case where the price is not equal, but nevertheless, the competitor would have to make a better price or a better product or render a better service before it could get the business.

Now, the exercise of control over the freedom of General Motors to purchase its requirements in a competitive market also constitutes an unreasonable restraint within [fols. 7565-8195] the meaning of the Sherman Act. The Supreme Court noted in the first Yellow Cab opinion, where it was alleged that there were unreasonable restraints upon the cab operating companies, the Supreme Court there said, and I quote at page 226:

"In addition, by preventing the cab operating companies under their control from purchasing cabs from manufacturers other than C. C. M., the appellees deny those companies the opportunity to purchase cabs in a free, competitive market. The Sherman Act has never been thought to sanction such a conspiracy to restrain the free purchase of good, in interstate commerce."

Now, that is the situation we have here. General Motors is restrained in its ability to buy wherever it wants to buy, from whatever company it wants to buy from.

[fol. 8196] EXCERPTS FROM THE ARGUMENT OF
MR. HARSHA

If I recall the arguments correctly that were advanced yesterday by counsel, he stated that the root of the Government's charge of du Pont's control over General Motors stems from that company's ownership of 23 per cent of the outstanding stock of General Motors.

So that I may not be accused of misquoting him, I should like to turn to his statement in that respect. I believe this is Mr. Cox.

After stating the proposition, which we have demonstrated by the evidence in the case, the evidence that the du Pont Company is the largest single stockholder and

that the rest of the stock is very widely dispersed among some 400,000 stockholders, then referring to this situation, counsel makes the statement that there is a certain element of truth in that statement, that is, that we say that this amounts to control, but he says it is a part of the truth and not the whole truth.

Continuing, he says, at page 14665 of stenographer's minutes,

"We all know that in fact frequently the owner of a large single and concentrated block of stock does have that kind of influence in the affairs of a corporation."

Then he goes on to argue that it does not follow that that kind of a concentrated block of stock has the power in all circumstances and under all conditions to control the corporation in the sense of changing the management.

Then counsel proceeded, as I recall, to postulate this position. He said that there was no proof that the du Pont Company exercises sufficient control or sufficient power to control General Motors that it can change the management of General Motors should that management [fols. 8197-8201] refuse to purchase products from du Pont.

I think that argument, your Honor, I say this in all sincerity, that argument ignores the facts of business life and ignores the facts of record in this case.

Counsel has completely ignored the voluminous documentation which the Government has adduced, showing that the du Pont Company has had a continuous control over the selection and the determination of the management of General Motors for over 30 years. We have shown that, at least since December 1920, du Pont Company has, in fact selected the top management of General Motors.

I have no wish at this point to burden the Court with a review of that evidence which I developed at some length in our opening argument, but I think that there is no need, viewed against that background of evidence, for this Court to speculate as to what might occur if du Pont and the management of General Motors should suddenly break over the issue as to whether General Motors should prefer du Pont as a supplier.

When the du Pont Company can determine, and in fact it has determined, as we have shown, during this entire 30-year period, who shall be the chief executive, who shall sit on the board of directors of General Motors, who shall sit on the governing committees of General Motors, then how can there ever arise the situation depicted by defense counsel?

I think the so-called acid test postulated by the defense counsel is no more than a hypothetical one, and certainly in the context of this record it is a most unreal situation.

[fol. 8202] Now, I was struck by one remark. I think it was a preliminary remark that was made by Mr. Cox in his opening argument to the Court—I should say closing argument to the Court—and that was that the general nature of this case is a restraint of trade case and a monopolization case.

[fol. 8203] Now, I think it is rather significant that he phrased it in that fashion in his opening remarks, because he didn't say this is a combination and conspiracy case in restraint of trade and to monopolize trade.

Now, I say, of course, as the Court is well aware, there is a substantial distinction and difference between these two statements and I think that distinction becomes more apparent when you analyze some of the arguments that have been advanced by the very able defense.

The Court may recall that some stress was laid by defense counsel on the argument that merely for the Government to show that du Pont has supplied 100 per cent of General Motors' requirements of a particular product or, later, 75 per cent of General Motors' requirements for certain products, does not demonstrate a restraint of trade.

Moreover they have argued to this Court that merely to prove that du Pont is a preferred supplier of General Motors does not prove restraint of trade. But I think that misses the central contention of the Government's case, and I earnestly suggest, your Honor, that there is, for example, a very basic difference between the examples cited by defense counsel in their arguments. There was one such, as I recall, where reference was made to the fact that General Electric purchased its entire requirements of refrigerator

paint from du Pont, and that, therefore, du Pont's position was no different vis-a-vis the Frigidaire subsidiary of General Motors.

Now, I think in the first instance it should be clear that at least so far as this record discloses, du Pont is the exclusive supplier, if you will, of General Electric because General Electric has decided of its own free will to buy [fols. 8204-8213] from du Pont and that is all that shows.

But in this case, and to the contrary, the Government has charged, and I believe we have proved, your Honor, without any question, that it has been the result of the understandings reached at a very early time between these two corporations, General Motors and du Pont, and that the understanding was that du Pont was to supply the requirements of General Motors to the extent that it was able to do so.

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[fol. 8214] Now, I would like to take up one other topic that I think has been hammered—I think I use the term advisedly—to some extent in this argument, and that is the question as to what the Government means, what has the Government charged in respect to this question of requirements.

And counsel have been most adroit, I believe, in saying that all manner of inconsistent arguments and positions have been taken by the Government in this respect, and I must say they have found us taking positions which, so far as I know, we have not taken. They talk of amendments to the understanding or agreement on requirements that took place in the first three years of the Durant-du Pont partnership. I know of no such modification of the understanding or agreement, nor do I know of any such allegation that has been made by counsel in argument or in its briefs. I think we ought to get back to what has been charged, and what we are now alleging the Government has shown in the evidence in this case.

Paragraph 56 of the complaint, your Honor, states that at the beginning of 1917 it was understood and agreed between General Motors and du Pont that General Motors would give preference to du Pont in buying products for use in its operations. It was agreed that General Motors

would purchase from du Pont all or substantially all of its requirements of products manufactured by du Pont.

Now, I think that the word "requirements" there had [fol. 8215] two very significant aspects: One, they are products which General Motors must use, they need in their own operations, and they are products which du Pont makes.

Now, the only amendment to this understanding has not been made by the Government. We have merely conformed, if your Honor please, to the evidence which we have adduced in this case showing that in 1923 du Pont and General Motors, by mutual understanding, did modify that understanding, and they did at that time decide the thereafter General Motors should be free to place between 20 to 25 per cent of its requirements with suppliers other than du Pont, and that is set forth in the Government's complaint, and it is also alleged in respect to United States Rubber in substantially the same manner.

But now I want to comment on this one argument that has been made because I think it has been done very adroitly by counsel; and that is that in some fashion counsel has argued that we must show throughout that there is this coercion exerted by du Pont, and that if you don't show this coercion, why, then this whole control thing falls apart.

Now that I think is unrealistic, and it is ridiculous, and it is not supported by this record, your Honor. The Government does not have to prove that, and I think if the Government tried to prove that it would itself indeed be rather unrealistic.

We have shown that the du Pont Company does have control; we have shown that the du Pont Company has determined the management; and we have shown that since 1917 there has been an understanding between the parties, [fol. 8216] and you don't have to coerce somebody that you have got an understanding with.

Now, as to the question of the word "requirements," we have never attempted to, so far as I know, argue that du Pont is the one who determines what General Motors' requirements are.

I think that would be an absolute absurdity. The du Pont Company is a manufacturer primarily of chemical

products. No right-minded du Pont executive is going to say, "Because we control General Motors we are going to determine what are the technical requirements of General Motors as an automobile manufacturer." They are going to give General Motors freedom to determine what they need in order to produce automobiles and sell them in a competitive market, and to that extent we are in complete agreement with the argument advanced by defense counsel, to that extent.

But of course, they leave out one very important consideration, and that is the understanding that du Pont is to be preferred if it produces the product which General Motors needs.

Now, for example, certainly I think it would be ridiculous for the Government to be held, if you will, to a standard of proof in this case such as that we had to show why didn't du Pont stop General Motors from going from open top or the fabric top automobile in 1935 over to the steel top.

Now, I think that would be an incredible situation. We don't have to prove anything like that. Du Pont isn't going to say to General Motors, "You can't go to a steel [fol. 8217] top because that is going to cut down your requirements for fabrics."

After all, du Pont is interested in General Motors from a number of aspects, and they are not going to destroy it.

Now, I think this position is one which counsel for the defense have very adroitly taken and they have, if you will, exaggerated the position just sufficiently so that they then set up a standard of proof which, if it occurred, would indicate these men were insane, and they were not that.

They left General Motors with freedom to determine what they needed. Counsel seemed to feel that they had made a point in respect, for example, to the refrigerator business, that du Pont hadn't coerced General Motors not to use porcelain which du Pont didn't make, and didn't coerce them to use its paint. Now, I think that is very unrealistic.

I think it is significant, however, that when General Motors, after deciding what its requirements were, and deciding that as to some of its production that it would go into paint, du Pont bobs up again with the business.

And I would like to pass from this point, but I rather got the impression that there was some weakness in the Government's case because in some fashion the Government has not shown that General Motors in the early days was coerced to drop its use of real leather, which was not produced by du Pont, and wasn't in fact coerced into using artificial leather.

Well, now, that is a very unrealistic position. If General Motors feels that in order to exist in a competitive market that it must use real leather, obviously you are going to let them use real leather, but when du Pont has the product that General Motors needs, which meets its requirements in terms of technical requisites, then we find throughout this record that du Pont has been the preferred supplier.

Now, they seem to make some sport of our statement on price and quality and service.

Well, I had thought that this question of requirements as satisfying GM needs would certainly fall under the word "quality" because, obviously, if you have something that General Motors either wouldn't use, couldn't use, or would put it at a disadvantage competitively in selling cars, that isn't meeting their quality requirements.

I think the record shows that in many instances over the years, price has not been, shall we say, the governing consideration.

In many instances in the record we have adduced, and in our brief we have referred to them in passing, where du Pont's prices in many instances were quite high, much higher than competition, but they did get the business nevertheless.

There was no thought of taking the contracts away from du Pont except once in a while, where Mr. Pratt refers to placing a little bit of business somewhere else as a disciplinary measure, and as soon as the price is met by du Pont, bingo, the business goes back to du Pont again.

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[fol. 8278] EXCERPTS FROM THE ARGUMENT OF
MR. BRASS

I come now to the third step in counsel's process of simplification. In the third step, counsel addressed himself to the restraints which flow from the control of General Motors and which have to do with the requirements of General Motors, and he made this step exceedingly simple.

He stated that, if he understood the Government's charge, it is that the freedom of General Motors to make its own decisions in the field of commercial operations has been restrained and General Motors has not been free to buy its supplies in the exercise of its own judgment.

That appears at page 14660 of the stenographer's minutes. That is the way counsel states that the Government says that commerce has been restrained.

Now, at that point counsel paid some lip service to the Government's contention that there has been a restraint of trade upon the freedom of competitors of du Pont and U. S. Rubber to sell to General Motors, but in his effort to simplify the case he brushed this aside and this is what he said, and I quote from page 14660 of the minutes:

"But it is clear to me and I think the Government will agree that what it means by that is that General Motors has not been free to buy from those competitors and not been free to make arrangements with those competitors of du Pont for exploitation of chemical discoveries."

But the Government does not agree that there is only one issue here with respect to restraint, and that the issue is only whether General Motors has been restrained in its freedom to buy.

Now, when counsel addressed himself to this question, there were two rabbits in the hat. There were two lines of restraint. These have been talked about throughout the [fol. 8279] trial. They have been argued here and in our briefs. These two lines of restraint were restraints upon the freedom of competitors to sell, and restraints upon the freedom of General Motors to buy.

Counsel argues further that if the Government is relying upon the percentage which General Motors purchased as

proof of the restraint, that that is not proof of restraint. But we have pointed out repeatedly we rely upon the percentages as the measure of the extent to which control over General Motors has been exercised.

Counsel made another argument which I thought was a rather curious one. He said that the preemption of the market or the precluding from a market is not really relevant in this case because when you speak of precluding or preempting a market you mean some arrangement. Now, counsel did not say what he specifically meant by this arrangement. If he meant a 100 per cent arrangement, that is not required by the law, and if he meant a written arrangement that also is not required by the law. Of course, where an arrangement is in writing the writing is in itself merely evidence of the existence of an arrangement.

Now, why is counsel raising arguments of this nature with respect to the restraints which have been imposed upon the freedom of competitors of du Pont and U. S. Rubber? I believe there is a good reason and that reason is because the law in the International Salt case, the Griffith case and the National City Lines case is very clear and counsel is unable to meet these arguments head on.

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